



FEASD + 116  
1199 T

Unpublished 19<sup>th</sup> century Natural History Manuscript

Kerelme Henry DIGBY [1800-1880]

The Naturalists Companion  
[Dublin ca 1820]









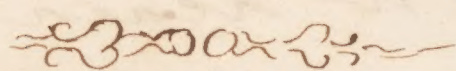


me  
Naturalists Companion

---

Containing drawings with suitable descriptions of a vast variety of Quadrupeds  
Birds, Fishes,  
Serpents  
and

Insects; &c.



accurately copied either from  
Living Animals.

or

from the Stuffed Specimens in  
the Museums of the  
College  
and

Dublin Society,

To which is added Drawings of several Antiquities, Natural productions &c. contained in those Museums.

by  
Therelm Henry Digby.



# Index

## A

	Page
Alder Bird - - - - -	110
Amphibiana Alba - - - - -	56
Armado, nine banded - - - - -	134
Adze from New Zealand - - - - -	214
Arrows Indian, - - - - -	12
Arrow, head of, ancient Irish	145
Ape White faced, - - - - -	305
Antelope - - - - -	504

## B

Badger - - - - -	9
Babirousa skull of - - - - -	11
Bow Indian, - - - - -	12
Bizarro Stones, - - - - -	18
Bat - - - - -	383
— great of Madagascar, - - - - -	29



Bee-eater, -----	362.
----- Indian -----	42.
Black Snake, -----	48
Boa Constricta -----	60
----- ringed, -----	97
Buzzard -----	114
Bell, antient Irish -----	166
Breast Pin, antient Irish -----	169
----- Steel -----	174
Bugle, Antient Irish -----	173
Bottle, Antient, -----	175
Bracelot from the Sandwich Isles, 223,	
Boar wild, under jaw of -----	171
Bridle, antient Bit, of -----	27
Bernacle -----	269
Butcher Bird, Pied -----	5
----- Lesser -----	356
----- Yellow Breasted, -----	359
----- Red Headed -----	359
----- Waved -----	360
Beaver -----	381
Bullfinch -----	398



Bunting yellow	403
Bittern	434
Blue Snake	441
Blue Headed Snake	443
Buprestus	444
_____ Bronze	444
Beetle, Hoary	444
_____ Bronze	444
_____ Herculean	444
_____ Stag	445
_____ Interrupted Stag,	445
_____ Capricorn	447
_____ Broad Water,	447
_____ Rough Indian,	445.
Brazilian Bullcomber	445
Butterfly	450
_____ the Menelaus,	447
_____ Orange tipped	447
_____ Black tipped yellow	448
_____ Idomenus	449



Butterfly, yellow, 449  
 \_\_\_\_\_ Scarlet Admiral 450  
 Bug, Black legged, 450  
 H.C.

Lentijeddes 452

Coffee Pot, Chinese 2

Lochnatoo 7

\_\_\_\_\_ Large 296

Crocodile 204

\_\_\_\_\_ young 9

Cornu Amoris, specimens of 15

\_\_\_\_\_ Small 227

\_\_\_\_\_ Split open, 15

Coote 25

Coate Mundi 76

Crane, Common 88

\_\_\_\_\_ Balearic, or Crown, 180

Crotulus, 99

Cameleopard, 116.

Chevrotin 129

Charter Horn 172

Camelion, 154.



Curler	26
Crab, Violet,	195
Clubs, Indian,	219
Chief Mourner, Dress of in Otaheite	
Corn, from New Zealand,	22
Wood	22
Shing George's Sound	22
Otaheite	22
Cap, from the Marquesas Island,	22
Low, Sea, tooth of,	22
Cassowary	284
Certia Formosa	323
Long tailed,	324
Corn Crane,	347
Cod,	357
Cat Wild, species of,	14
Cuckoo,	412
Cacique, Black and yellow	39
Crow red legged	427
Canary Finch	430
Coluber Doliatus	443
Carabus, Glossy green,	448



Cochroach, American	449
D,	
Deer Moose, horns of,	10
Fallow	392
Dutch Chinese,	26
Drum, from Tongataboo,	214
Dublin, antient map of	170
Dove, Damascus,	37
Necklace, from China	297
Ring, Lushat, or Queest	352
Turtle,	354
Dragon Fly,	452.
E,	
Eagle, Brown	81
from Hudsons Bay,	80
Ermine,	376
Esculapian Serpent,	440
F,	
Flamingo, description of	127
Fish Flying	142
Fan, Indian,	166



Flute from Otakeite, ---	214
Foumart, ---	326
Fox Greyhound, ---	364
Fieldfare, ---	407

## G.

God, Household, ---	31
_____ Sandwich Islands	3
Goss-hawk, ---	105
Gull, Black backed	20
_____ Common	281.

Galley-Roman, Model of	218
Gold Head, Traveller	225
Grosbeak, ---	40
Gold finch, ---	431
Grebe, great crested, ---	438
_____ little, ---	255.
Grasshoppers, Indian, ---	446
_____ Ephippiger	448

## H.



Helmet antique, -----	1
----- ornament for -----	176
----- Indian, -----	4
Hlookha -----	5
Hubble Bubble, -----	6
Heads antique, in Terra Cotta -----	31
----- Small Bronze -----	33
Hoopoe -----	38
Hedgehog of land Urchin -----	377
----- Sea -----	60
Hen Harrier -----	104
Harp of Brian Borhorne -----	164
Horn Fish, -----	211
Horn Bird, head of -----	228.
Hooks fishing, -----	215
----- from the Friendly Isles, -----	216
Horse Sea, tooth of -----	228
Humming Bird, -----	249
Harver du Vats, -----	189
Heron, -----	312



Hamster, -----	386
Herring, -----	418,
J.	
Idol, Japanese, -----	1
Ibis, Scarlet, -----	126
Images Egyptian, -----	39
Instrument, of Music, Antient Irish	164
----- for cutting Wood, at Otaheiti	219
----- for drawing teeth, antient	170
Inkstands, antient Irish -----	19
Indian Chief, dress of. -----	224
Javelin Indian, -----	219
Jer Falcon -----	112
Junk Chinese, Model of. -----	140
Jay, -----	390
----- Small American, -----	292

Jh.

Thing Bird -----	8
They, curious Antique -----	33
----- found at Rome, -----	34
----- Porraps, -----	177



Shute	102.	XV
Shingfisher,	54	
White throated,	356	
Shnife, of the Sandwich Islands,	213	
Shanguroo small,	8	
large	290,	
Shestrel,	321	
L,		
Lobster	Appendix 488	
Lance, Antient	3	
Lizard	11	
Scaly	4	
Green	160	
Small Green,	212	
Flying,	41	
White	194	
Large Green	242,	
Lantern Fly, of Peru,	451	
Lynx	13	
Lion Sea, Skull of,	11	
Lion Seal	18	
Liath Meisicith	165.	
Lance Indian,	219	
Lacrimatories	33	
Lama,	Appendix 507	



Lamps, ancient, -----	35
Lachsia -----	40
Linnet Grey -----	432
Long Snouted Snake, -----	159
Locust Spotted, -----	446
Lamia Yellow -----	447
----- Oculator, -----	447.

## M.

Mackarel -----	Appendix 500
Mammoth, tooth of, -----	18
Montrey -----	12
----- Great Lion -----	25
----- Small Lion, -----	79
----- White Faced, -----	304
----- Ringtailed or -----	78
----- Whistler of the Woods, -----	78
----- Mangeby, -----	78
Mosaic pavement, piece of -----	32
Maccaw, scarlet, -----	70
----- Blue, -----	71
----- Green, -----	310
Merlin, -----	110



Mummy Egyptian, .....	132
Small .....	133.
Mouth Organs, from the Friend Isles. 217	
Man, dancing, .....	217
Mantis, two kinds of, .....	229
Mallard, .....	265
Magpie, .....	300
Mergers Lapper, .....	335.
Mouse, Shrew, .....	380.
Moth, Great Atlas. ....	451
Great Unicorn, .....	451
Deaths Head .....	450
White Branded, Tiger, ..	450
Burnet. ....	450

## N.

Naval Warrior, from Otaheite .....	220
Neck Pins, antient, .....	34
Steel .....	31
Nuthatch .....	416.



## O,

Owl, Great Horned from Hud. <sup>ns</sup> Bay,	23
_____ small, from D <sup>o</sup> .	299
_____ White, or Barn, -----	243
_____ Common Horned, -----	248
Orb. Seas, Shell of -----	189
Ornaments, antient Gold, -----	168
Orang Outang, -----	173
Oriole, Golden -----	268
Ouzel, Black, -----	350
_____ Rock, or Ring, -----	346
_____ Water, -----	258.

## P

Place. ----- c Appendix.	499
Pheasant, Pied -----	251
_____ Golden, -----	19
_____ Female Golden,	251
_____ Pencilled, -----	21.
Proserpine, an Antique, -----	16
Pelican of the Wilderness,	22
Parmijan, -----	28.



Paradise Bird of	24
_____ Black d <sup>o</sup> .	294
Pines, antient Danish,	29
_____ d <sup>o</sup>	30
Pompadour Bird,	37
Penguin,	43
Panther,	68
Puffin,	100
Porcupine,	177
Parasole Chinese,	133
Pot, curious antique,	160
Paddle, Indian,	215
Pillow, from Otaheite,	215
_____ from Sandw. Islands	2
Porpesse, South Sea, Skull of	228
Partridge	260
_____ French,	262
Peacock,	370
Pintado,	395
Pee-wit,	400,



Paraguet Ringed, -----	13
Parrot, Variegated, -----	287
----- Ponanto, -----	288
----- Grey, -----	289
----- Non Pareil, -----	5
----- Prozell, -----	295.
----- Gorce, -----	298

## Q

Quail, -----	278
Quaker Bird -----	363

## R

Ruff -----	17
----- R <sup>o</sup> -----	46
Rat Flying, -----	26
Ring antient, found in a grave, -----	32
----- Antient Roman, -----	35
----- Antient Irish, -----	172
Rattle Snake, -----	158
----- Grape, -----	50
Reticulated Snake, -----	56




Rat mouthed Fish, . . . . .	211
Raven, . . . . .	302
Roller, . . . . .	345
Red breast, . . . . .	398
Red Start, . . . . .	424

## S

Sword, Indian . . . . .	4
_____ Spanish . . . . .	4
_____ Irish . . . . .	167
Sword Fish, . . . . .	190
Scepter Indian, . . . . .	6
_____ Irish, . . . . .	32
Shield, Indian, . . . . .	6
Scourge Indian, . . . . .	6
Sloth, . . . . .	14
_____ D <sup>o</sup> . . . . .	121
_____ Great Ursine, . . . . .	179
Shark, Blue, . . . . .	193
_____ Bottle'd Nose, . . . . .	15
_____ young, . . . . .	146.



Shrub, Sea, -----	17
Spur, antient Irish, -----	27
_____ Indian, -----	28
Spear, broken head of, -----	27
_____ Brass, head of, -----	28
_____ Danish, -----	30
_____ Irish.  -----	173
_____ Indian, -----	219
_____ Whale, head of -----	216
Starling or Stare, -----	276
_____ Indian, -----	38
Spectail Snake, -----	55
San Fish, horn of -----	60
Surinam Serpent, -----	98
Squirrel American -----	131
_____ Small grey, -----	308
Snuffers, brass, -----	171
Seal, brass, -----	176
Seal, -----	241
Star Fish, -----	211



Snipe, -----	274
Sauce Boat from Otaheite, -----	216
----- from King Georges Sound, -----	213
Sparrows from the Prasil's, -----	311
----- Violet, -----	12
----- Java, -----	297
----- Painted, -----	363.
Shoveller, -----	330
Shunk, -----	332
Hoats, -----	373
Snow, -----	433
Spotted Snare, -----	442
Scorpion, -----	448
Spider, Armenian, Bird, -----	448
Savage Caerulian, -----	448.
T	

Tortoise, land, -----	230
----- Shell of, -----	17
Turtle, -----	233.
Terminees, an Antique -----	16



Soucan, -----	20
Sern, -----	22
Simor, an Irish antique -----	32
Sanager. -----	40
----- purple, -----	362
Shumb Serev -----	167
Turkey American, -----	131
Truncheon, Irish, -----	176
Tobacco Pipe Fish, -----	194
Sommahawth Indian, -----	219
Sathoring instruments for -----	222
Seal, -----	319
Thrush, Migrating -----	42
Sit-Mouse-Greater -----	403
V	
Unicorn fish, horn of, -----	17
Urchins Sea, -----	57
----- S <sup>o</sup> . -----	203
Von Antient Irish, -----	157
----- small S <sup>o</sup> . -----	4



Vases, Grecian, .....	2
_____ Roman, .....	133
Vessels, antient Irish, .....	169
_____ Roman, .....	33
Viper, .....	93
Vulture, .....	183

## W.

Wolf, .....	62
Whip Snake, .....	93
Woodcock, .....	271
Widow Bird, .....	325
Woodpecker, red crested, .....	337
_____ Great Black, .....	336
_____ three toed, .....	338
_____ Yellow Crested, .....	343
_____ Small Spotted, .....	344
_____ Yellow Spotted, .....	344
_____ Female, Golden-Ringed	346
Wren Willow, .....	406
_____ Golden Crested, .....	410
Whinchat, .....	409



Wryneck,	423
White Plover,	428
Wagtail Pied,	425
Letu,	Appendix 511



\_\_\_\_\_ each moss  
 each shell, each crawling insect holds a rank  
 Important in the plan of him who form'd  
 the scale of beings, holds a rank which lost  
 Would break the chain and leave a gap  
 that nature's self would rue





*a Japanese Idol, a bronze figure of 10  
inches high*



*an ancient Helmet found in a  
cave 40 feet beneath the ground.*



three antique Grecian Vases the largest about a foot  
and a half high



a Sandwich Island Pillow made of some  
dark wood.



a Chinese Coffee pot and stand.





Two Sandwich Island Gods, the largest  
about 2 feet and a half high, they are made  
of very black wood.



An ancient Lance about 6 feet long.



1<sup>st</sup> an Indian Helmet & sword. and



ancient Spanish  
Sword.



3 ancient Irish urns.



The Scaly Lizard, or Phatagin  
is a native of Guinica. it may be said to be the  
connecting link in the chain of being between  
Quadrupeds and reptiles,





*The Bird Butcher's Bird.*



*a Kacha or Indian Tobacco Pipe.*



an Indian Scepter used for fanning their Chiefs.



a Shuttle Bubble or Indian Tobacco Pipe.



an Indian Shield.



an Indian Knife.





The Buff - about the size of a thrush.  
 description see the drawing of the other Buff Page 46  
 The Cockatoo ~







a Kangaroo.



is a native of New Holland where it was first discovered  
by Sir J. Banks. it is furnished with a pouch similar to  
for further description see page 291. the Gopher



a young Crocodile, for description of this  
terrible animal see Page 205.



The Badger.

is a native of the temperate climates of Europe and is found in Spain France Italy Germany Britain and Sweden.



*Woolly Deer and other horns*



*a pair of Woolly Deer horns the largest  
ever seen.*



*The Skull of a Babirousa.*



*The Skull of a Sea Lion.*



*a Lizard.*



*an Indian Bow,  
spears, and Arrows.*



*The Violet Sparrow.*



The ring'd Paraguel.



The Lynx, about the size of a  
 wolf.  
 is a very destructive animal. It feeds on Weasels, Ermines,  
 Gophers &c. also Sheep Deer hares goats, it howls like a  
 Wolf. its fur is valuable and imported in vast quantities,  
 is common in the forests of the Northern parts of Europe  
 Asia and America.





a Species of Wild Cat.





a very fine specimen of the *Cornu Ammonis* or petrified snake shell open. This is one of the finest specimens in Europe.



two very large specimens of the *Cornu Ammonis* found in a large block of Portland stone when building the present Custom House.



The Bottled nose Shark  
for description see Page 147





Proserpine -  
 The length of this curious antique is 18 inches  
 its breadth 14. it was found in Rome as well  
 as the following and presented to the Dublin Society  
 by  
 Sir Walter Synnot.



The God Terminus found along with the above  
 height 16 inches





a beautiful Sea Shrub.



a very large Land Tortoise shell, for the  
drawing and description of this Animal  
see Page 230,

///  
The horn of the Unicornfish it is 6 feet long of the finest Ivory and it  
grows out of its nose with which it scrapes about it attacks and  
frequently kills the whale.





The Lion Seal - length 2 feet 6 inches.



The tooth of the mammoth length 9 inches.

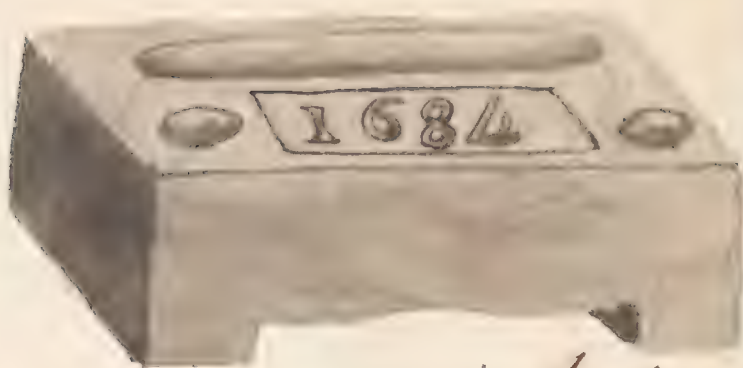


Bezoers stones taken out of the stomach of an Animal in the East Indies the small one is the size of a small cannon ball, the large split one, measures 9 inches in length,



Bezoers composed of concentric cuts, with a small cavity in the middle containing a bit of straw it is a concretion found in the stomachs of certain Animals of the goat kind, the large one is two inches in length and shines like marble.





two ancient stone Instands, found in Ireland.



The Golden Pheasant.  
For description of this bird see Page 251.





The Toucan - is only found in the warm climates of South America. for further description see Appendix. P. 515



Black backed Gull. is the largest of the tribe is rarely seen in Britain, for further description see Page 282.





The Pheasant Pheasant - for description of this bird, see  
Page 251.



22 For description of this bird see the  
 Appendix page 501.



The Pelican of the Wilderness, a native  
 of Africa and America; it was once known in  
 Russia but it is not to be met with now.



The Tern or Sea Swallow — is common in Britain  
 and in all Europe Asia and America.





the great  
From  
the height

Horned Owl  
Hudsons Bay.  
of this surprising  
Bird is 2 feet!



24  
The Bird of Paradise in nature of the *Protonotaria*  
for further description see page 293.







*The great Lion Monkey.*



*The Cote.*





*The Chinese duck ~ ~*



*The Flying Rat. from Botany Bay.*



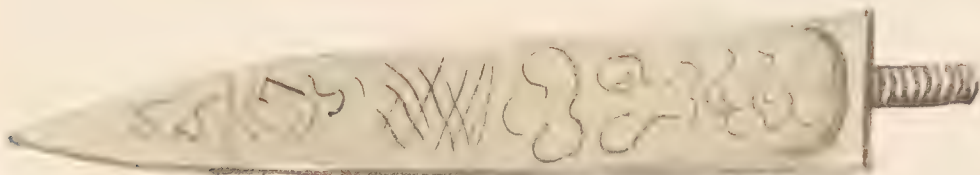
the broken head of a  
spear 6 inches long. 24



a curious Antique Spur found  
under ground near Clontarf  
supposed to have belonged to Brian Borke  
Length 9 inches



an ancient bit of a bridle 11 inches long  
found in a Turf bog at Ballymoyer  
County of Armagh.







Two antique Indian Spurs.



This brass head of a spear is 5 inches long and was found in a bog on the Lands of Conaslyr Co Roscommon 16 feet deep in the gravel. The turf over it was solid and had not been cut before in the memory of man.



The Ptarmigan. this bird is rendered remarkable from the peculiar formation of the foot which bears so strong a resemblance to that of the hare that its tracks in the snow are mistaken for that animal. for further description see Appendix Page 524.





The great Bat of Madagascar  
 preserved in a "jar of spirits" - for description  
 see the Appendix, Page 517.



old Dancih  
 Pihes  
 Length of both  
 13 inches





an ancient  
Danish Spear.  
9 inches long.



These two were found in a bog at  
Geashill



an Ancient  
Pike  
11 inches long.





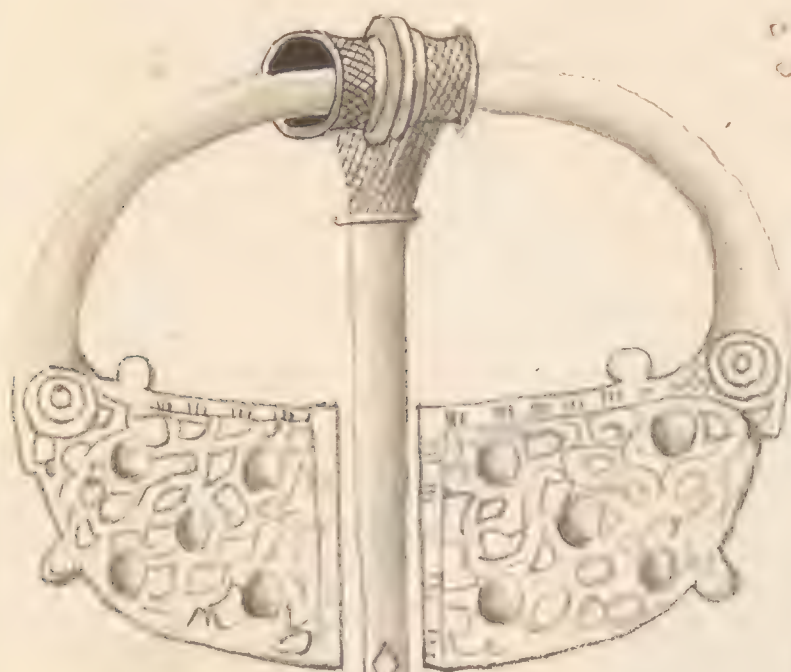
Two Antique Heads in Terra Cotta 31  
Found at Rome ~



A Household God Taken from some ruins of the  
Cathedral of Smyrna when repairing that  
Antient Building it is only 2 inches and a half  
high.

Two Steel Neck-Pins

Found on the hill of  
Ballyspeltan under a  
Large Rock



Length 9 inches





a Piece of Mosaic Pavement  
Found near Rome

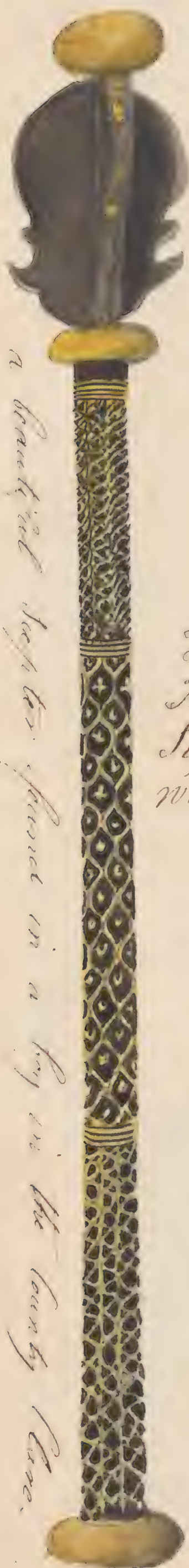


The Tinnor or great circle of the  
Irish Cabiri; an emblem of the  
Supreme Being, without beginning  
without end, it was found near  
Cashel.



a <sup>ring</sup> seal found in a grave  
in the City of Limerick

a beautiful dagger found in a bog in the County Clare.





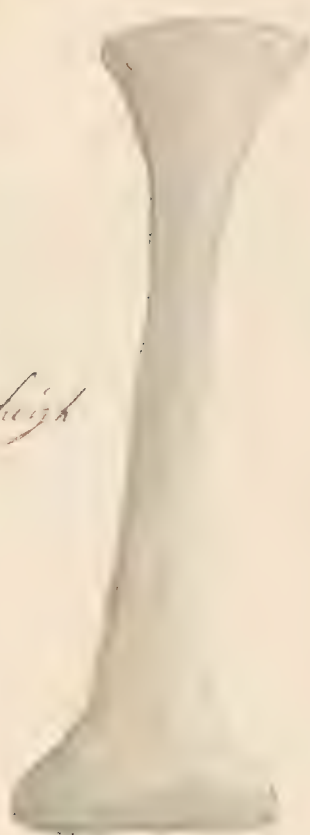
3 inches high.

4 inches high

33



one inch high



2 inches high.



Four Lacrimatories found in the Catacombs near Rome, the two first in Terra Cotta the other two of glass.



a curious old Key found in the Ruins of the Monastery at Boyle in the County Roscommon



a small antique head in Bronze found in Rome.



Two Antique Bronze Vessels found at Rome they are 2 inches high.



71/4

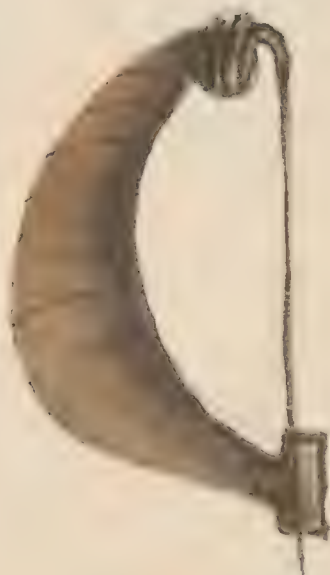
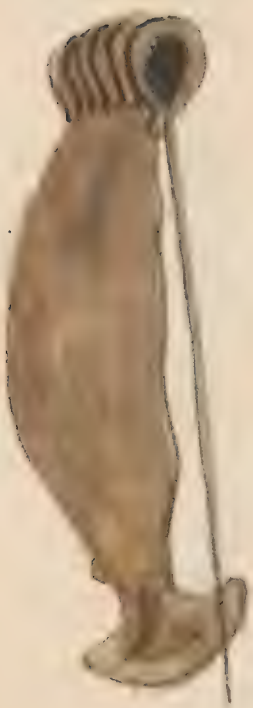
Five Antient Metal Pins



An Antique Key found at  
Rome - 3 inches long.



5 inches long.





35  
Four Ancient Lamps found in the Catacombs  
at Rome the first one is the largest and is 5  
inches long.



Rings found with a number of others in a sepulchre  
monument in the spot where the famous battle  
of Cannae is supposed to have been fought  
what ever they might have been formed of, is  
uncertain their texture is as the drawing represents  
and they seem so old and rotten that a  
breath of wind would disperse them into nothing.



The Purple-tail Bird, from Cayenne  
South America.



The Damascus Dove.





The Indian Starc.



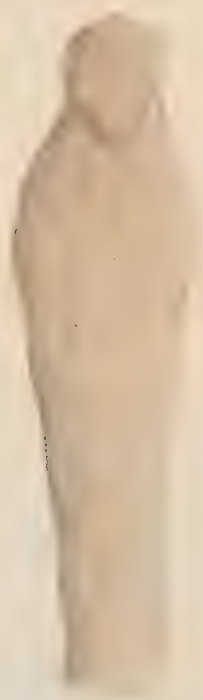
The Hecpoe. is a solitary bird and very rarely



seen in our Islands, in Egypt where they are common  
they are never seen in flocks.



Black and yellow Cacique of Brazil.



Egyptian Images about two inches high.



The Tanager of Brazil. The Grosbeak, and 40  
the Lachnia -



Of the Grosbeak -

This genus is not numerous in these kingdoms and of them  
which we call ours most of them are only visitors,  
they are in general shy and solitary, living high  
in woods far from the habitations of man.  
their vocal powers are not great and are not much  
known or sought after. their most conspicuous  
character consists in the thickness and strength  
of their bills. their general appearance is like  
the Finch tribe. of which they may be reckoned  
the principle branch.





### The Flying Lizard.

Wen we to credit the invention of fables and superstition how dreadful would be our idea of the Dragon! happily however such ravagers are no where found to exist at present, and the whole race of Dragons is dwindled down to the Flying Lizard a little harmless creature only 8 inches long reckoning the tail, that only preys upon insects and even seems to embellish the forest with its beauty.



*The Migrating Thrush,*

42



*The Indian Bee-eater.*





*The Penguin . .*



The Penguin is but ill fitted for flight, and still less for walking. the largest of this kind indeed cannot fly at all their wings serve them as paddles to help them forward when they attempt to move swiftly and in a manner walk along the surface of the water.

This awkward position of the legs which so unqualifies them for living upon land, adapts them admirably for a residence in water, in that, the legs placed behind the moving body, pushes it forward with greater velocity and these birds like Indian canoes are the swiftest in the water by having their paddles in the rear.

They walk erect with their heads on high their fin-like wings hanging down like arms so that to see them at a distance, they look like so many children with white aprons.



45  
hence they are said to unite in themselves the  
qualities of men, fowls, and fishes.

like men, they are upright, like fowls they  
are feather'd and like fishes they have  
fin-like instruments that serve for all the  
purposes of swimming rather than flying  
they feed upon fish, and seldom come ashore  
except in the breeding season.

The Penguin lays but one egg, and on  
frequented shores is found to burrow  
like a Rabbit sometimes three or four  
take possession of one hole and hatch  
their young together.

their flesh is rank and fishy,  
in some it is so tough and the feathers  
so thick that they stand the blow of  
a scymitar without injury.





## The Puff.

The male of this curious species is called the Puff and the female the Peewe. It very rarely happens that two Puffs are alike in the colour of their Plumage.

These birds leave Great Britain in the winter and are then supposed to associate with others of the *Fringa* genus. in the spring as soon as they arrive again in England and



take up their abode in the fens where they were bred, each of the males (of which there appears to be a much greater number than females) immediately fixes upon a dry or grassy spot in the marsh. to this spot it appears he wishes to invite the female. as soon as a female arrives and is observed by the males her feeble cry seems as if it roused them all to war for they instantly begin to fight and their combats are both long and desperate, Buffon says "they not only contend with each other in single encounter but they advance to combat in marshalled ranks."

The Puff is highly esteemed as a delicious dish and is sought after by fowlers with great eagerness. These birds are common in the summer season in the fens of Denmark, Sweden, and Russia, and



are also found even as far north as  
Iceland.



### The Black mamba

is the largest of English serpents sometimes  
exceeding four feet in length.

the whole species is perfectly inoffensive  
taking shelter in dunghills and  
among bushes in moist places whence  
they seldom remove unless in the midst



of the day in summer when they are called  
 out by the heat to bask themselves in the  
 sun. the Black snake preys upon frogs  
 insects, worms, mice, and young birds,  
 and considering the smallness of the  
 neck it is amazing how large an  
 animal it will swallow. the Black snake  
 of Virginia, which is larger than  
 ours preys on Partridges chickens and  
 young ducks. it is often found in the  
 hen roost and will devour the eggs even  
 while the hen is sitting on them  
 The whole of this tribe is oviparous,  
 laying eighty or an hundred eggs at  
 a time, in dung hills or hot-beds, the  
 heat of which aided by the sun brings  
 them to maturity.  
 During Winter they lie torpid, in banks  
 or hedges or under old trees.





The Grape Rattle Snake is bred in



America, and in no part of the old World.  
 Some are as thick as a mans leg and six  
 feet in length, but the most usual size is  
 from four to five feet long. but that which  
 besides their superior malignity, distinguishes  
 them from all other animals, is their rattle,  
 an instrument lodged in their tail,  
 by which they make such a loud, rattling  
 noise, when they move, that their approach  
 may readily be perceived and the danger  
 avoided. This Rattle which is placed in  
 the tail, somewhat resembles, when taken out  
 of the body, the curb chain of a bridle:  
 it is composed of several thin, hard,  
 hollow bones, linked to each other and  
 rattling upon the slightest motion.  
 it is supposed by some that the snake  
 acquires an additional bone every year,



and that from this its age may be precisely known, however this may be certain it is, that the young snakes of a year or two old, have no rattles at all, while many old ones have been killed, that had from eleven to thirteen joints each. They shake and make a noise with these rattles with prodigious quickness when they are disturbed. However the Peccary and the Vulture are no ways terrified at the sound, but hasten at the signal to seize the snake, as their most favourite prey. It is very different with almost every other animal. the certain death which ensues from this terrible creatures bite, makes a solitude wherever it is heard. it moves along with the most majestic rapidity, neither seeking to offend the larger animals nor fearing



their insults. if unprovoked it never meddles with any thing but its natural prey. but when provoked it makes a desperate defence. it erects itself on its tail, throws back the head and inflicts its wound in a moment. The very instant it is inflicted it appears more painful than the sting of a bee.

this pain, which is so suddenly felt, far from abating, grows every moment more excruciating. the Limb swells, the venom reaches the head, which is soon of a monstrous size, the eyes become red and fiery. The pain becomes insupportable, and some expire in five or six hours, but others who are of a stronger constitution survive the agony a few hours longer. only to sink under a general mortification which ensues, and corrupts the whole Body.





### The Kingfisher.

To take notice of the many strange and contradictory accounts of this bird as well as of its nest would occupy too large a portion of this work. except in the breeding season, this bird is usually seen above, flying near the surface of the water like a brilliant meteor. Ornithologists say that they are found in almost every part of the globe. however they are no where numerous.





*The Spectail Snake.*





The Amphibiaena Alba.

or the Double-headed Serpent, is remarkable for moving along with either the head or the tail foremost. whence it has been thought to have two heads. some have affirmed that its bite



is dangerous, but this must be a mistake  
as it wants the Lungs, and consequently  
the elaboratory that prepares the  
Poison.



sea Urchins



To a slight view the sea Urchin may be compared to the husk of a chestnut, being like it covered with a number of bony prickles standing out on every side. The mouth is placed downwards and is large and red furnished with five sharp teeth.

but what makes the most extraordinary part of this Animal is its horns and spines that point from every part of the body like the horns of a snail and that serve at once as legs to move upon, as arms to feel with, and as instruments of capture and defence. Between these horns it has also spines which being hard and prickly, the horns being soft longer than the spines and never seen except in the water.

a few minutes after it is taken out of the water, all the horns are withdrawn into the



body and most of the spines drop off.  
 It is generally said of insects that those  
 which have the greatest number of legs  
 always move the slowest. but this animal  
 seems to be an exception to that rule. for  
 though furnished with two thousand  
 spines and twelve hundred horns all  
 serving for legs, yet it runs with  
 great swiftness at the bottom, and it is  
 sometimes no easy matter to overtake it.  
 some kinds are as good eating as the  
 Lobster and its eggs which are of a deep  
 red are considered as a very great delicacy  
 in all places however except the  
 Mediterranean they are little sought  
 after except as objects of curiosity.





The horn or nose of the Saw =  
Fish.



The Sea Hedgehog.

These frightful animals are of  
different sizes, some not bigger



The Boa Constrictor. this one measured 19 feet.



than a foot ball, and others as large as a bushel. the Americans often amuse themselves with the barren pleasure of catching these frightful creatures by a line and hook baited with a piece of sea-crab. The animal approaches the bait with its spines flattened, but when hooked and stopped by the line, straight all its spines are erected, the whole body being armed in such a manner at all points, that it is impossible to lay hold of it on any part.

For this reason it is dragged to some distance from the water, and there it quickly expires. in its middle is a sort of bag or bladder filled with air, by the inflation of which the animal swells itself as round as a ball, especially when enraged





Copied from a very fine living animal, now exhibiting in Dublin.



All Naturalists agree in placing the Wolf  
 and the dog in the same class, as indeed  
 from an inspection of their outward form  
 one would be led to conclude that the Wolf  
 was a dog in its natural state of freedom.  
 The appetite of the Wolf for every kind of  
 animal food is excessively voracious, and  
 although nature has furnished it with  
 every requisite for pursuing and conquering  
 its Prey, it is frequently reduced to the last  
 extremity, and sometimes perishes for  
 want of food. so great is the general  
 detestation of this destructive creature, that  
 all the wild animals endeavour to  
 avoid it, and often escape by their  
 superior swiftness. when pressed with  
 hunger from repeated disappointments



the Wolf becomes ingenious from want, and courageous from necessity. it then braves every danger, and even attacks those animals that are under the protection of man. sometimes whole droves join in the cruel work of general devastation, roam through the villages and attack the sheep-folds. they dig the earth under the doors, enter with dreadful ferocity, and put every living creature to death before they depart. the Horse is the only tame animal that can defend itself against them.

all the weaker animals become their prey, even man himself, upon these occasions frequently falls a victim to their rapacity, and it is said that when once they have tasted human blood they always give it the preference - hence the Old Saxons believed that it was possessed by some evil spirit and called it the Were-Wolf.



The Wolf has great strength, especially in his neck and jaws. he can carry a sheep in his mouth, and easily run off with it in that manner. his bite is cruel and deadly. he almost incessantly prowls about for prey. his sense of smelling is peculiarly strong. the odour of carrion strikes him at the distance of near a league. Wolves are capable of bearing want of food for a long time. to allay their hungry stomachs they will fill them with mud. they have been known to follow armies and assemble in troops upon the field of battle, tear up such bodies as have been carelessly interred and devour them with insatiable avidity.

These animals abound in the immense forests of Germany, where the following methods are taken to destroy them,



in some very sequestered parts of the forest, they  
 hang up a large piece of carrion to the branch of  
 a tree, having made a train of some miles  
 long, leaving small pieces of putrid flesh  
 here and there to allure the wolves to the  
 spot. They then wait till it is dark  
 when they sometimes find two or three  
 wolves assembled, leaping and straining  
 themselves to catch the bait. and then  
 the hunters dispatch them with fire-  
 arms. Wolves are also caught in pit-falls  
 it is remarkable that when this animal  
 finds there is no possibility of escaping,  
 his courage entirely forsakes him, and  
 he is so stupefied with fear that he  
 may be taken alive without danger.  
 Wolves are also taken in nets into which  
 the hunters drive them and when they  
 are entangled. they are killed with  
 clubs and hatchets. Wolves are found



with some variety in almost every country of the world. those of Senegall are larger and fiercer than those of Europe. in North America they are small of a dark colour and may be easily tamed.

The appearance of these Animals near the habitations of the Indians sometimes indicates that the Bison or the Deer is at no great distance. in the Northern regions there are Wolves entirely white. The one from which this drawing was taken had come from Pussia and was the largest Wolf ever seen in Ireland he was uncommonly fierce and growled most dreadfully at the approach of any one near his cage.



The Panther.



Copied from a beautiful living animal, exhibited in Dublin.



The Panther is next in size to the Tiger. it inhabits Africa, from Barbary to the remotest parts of Guinea. its manner of taking its prey is the same with that of the Tiger, either lurking in thickets or creeping on its belly till it comes within reach. when pressed with hunger it attacks every living creature, but happily prefers the flesh of Brutes to that of Man kind, it will even climb up trees in pursuit of Monkeys and lesser animals so that nothing is secure from its attacks. The Ancients were well acquainted with these animals. The Romans drew prodigious numbers from the deserts of Africa for their public shows. Scorus exhibited an hundred and twenty at a time. Pompey four hundred and ten, and Augustus four hundred and twenty. they probably thinned the coasts of Mauritania of these animals, but still they swarm in Guinea.





11. Macaw

This one as well as the following are copied from living birds exhibited in Dublin.







This Bird is the largest of the Parrot Tribe and excepting in size does not differ from it having strong hooked bills for breaking open nuts and other hard substances on which they feed. and loud harsh voices, by which they fill their native woods with clamour.

The tongue of this bird somewhat resembles that of a man, for which reason some assert that it is so well qualified to imitate the human speech.

The Parrot, though common enough in Europe, will not however breed here.

The Climate is too cold for its warm constitution. They breed in hollow trees which they scoop out for the purpose.





*Orang Cutang.*

*copied from a young animal exhibited  
in Dublin.*



The Orang-Outang is the largest of all the ape kind, and makes the nearest approach to the human figure. but yet the interval which separates the two species is immense, the resemblance in figure and organization neither make him approach the nature of man, nor elevate him above that of the Brute.

he is found in the interior of Africa, in Madagascar, Borneo, and in some parts of the East Indies. it is a solitary animal, avoids mankind, and lives only in the most desert places. the largest of the kind are said to be about six feet high, very active strong and intrepid, and capable of overcoming the strongest man. they are likewise exceedingly swift and cannot easily be taken alive. they live entirely on fruits and nuts, will sometimes



attack and kill the negroes who wander  
 in the woods. when taken young the  
 Orang Outang is capable of being tamed.  
 The one from which the above drawing was  
 taken was but 3 feet high and very  
 docile. it sometimes went upright like  
 a man, but its usual attitude was as  
 the drawing represents sitting with his  
 hands across. it held a candle in hand  
 whilst the Author was sketching him, to  
 light the hind part of his body, which  
 was lost in the darkness of the cage.  
 a variety of the kind is found in Guinea  
 called the Pijmy. much smaller than the  
 last. and is supposed to have been the  
 Pithecos of the Antients. Troops of them  
 assemble together, and defend themselves  
 from wild beasts, by throwing a cloud of  
 sand behind them, which blinds their  
 pursuers, and facilitates their escape.





The Coati mundi - copied from a  
Living animal exhibited in Dublin.

This Animal has some resemblance to the  
Bear in the length of its hind legs, in the  
form of its feet, and in the bushiness of  
its hair. but it is small, its tail also is



117  
is long and variegated with dark rings.

its upper Jaw is much longer than the lower,  
and very pliant, it preys upon Young  
birds, eggs and small animals.

This creature inhabits Brazil and Guiana,  
runs up trees very nimbly, eats like a  
dog, and holds its food between its fore  
legs, like the Bear. The Coati stands  
with ease on its hind feet, in which  
Attitude the Author was obliged to  
represent him. as in any other attitude  
he was incessantly moving and the  
extreme darkness of his cage, totally  
hid the hinder parts, except when  
standing upright at the front of  
his cage. it is said to gnaw its own  
tail, which it generally carries erect,  
and sweeps it from side to side.





Whistler of the Woods -

copied from a living animal exhibited in Dublin.



The Mangabey  
copied from a living  
animal exhibited  
in Dublin.





*The Great Ursine Sloth.*

*copied from a living animal now exhibited in Dublin.*



*a Sagoona or small Lion monkey.*

*copied from a living Animal exhibited in Dublin. not much larger than a mouse.*





The great eagle  
 from Hudson's Bay  
 from a living bird exhibited  
 in Dublin



81 Here again begins the Dublin Society, which had  
been broken off from Page 62.



The Brown Eagle



# Of The Eagle.

The first of these represents the great brown Eagle from Hudsons Bay, copied from a living bird. The legs of this noble creature were nearly as thick as those of a man. The other is the common brown Eagle of Ireland copied from a stuffed specimen in the Dublin Society. They have all however the same rapacity, the same form, the same habits and the same manner of bringing up their young.

In general these birds are found in mountainous and illpeopled countries, and breed among the loftiest cliffs. They choose those places which are remotest from man, and upon whose possessions they but seldom make their depredations, being contented rather to follow the wild game in the forests, than to risk their safety to satisfy their hunger.

it requires great patience and much art to tame an Eagle, and even though taken



young, and brought under by long assiduity  
 yet still it is a dangerous domestic, and  
 often turns its force against its master.  
 when brought into the field for the purpose  
 of fowling, the falconer is never sure of its  
 attachment. that innate pride and love  
 of liberty, still prompts it to regain its  
 native solitudes, and the moment the  
 Falconer sees it, when let loose, first stoop  
 towards the ground, and then rise per-  
 pendicularly into the clouds, he gives  
 up all his former labour for lost, quite  
 sure of never beholding his late prisoner  
 more. sometimes however, they are  
 brought to have an attachment for  
 their feeder, they are then highly  
 servicable, and liberally provide  
 for his pleasures and support.



when the Falconer lets them go from his hand, they play about and hover round him till their game presents, which they see at an immense distance, and pursue with certain destruction.

of all the animals the Eagle flies highest. of all birds also he has the quickest eye, but his sense of smelling is far inferior to that of the Vulture. he never pursues therefore but in sight, and when he has seized his prey, he stoops from his height, as if to examine its weight, always laying it on the ground before he carries it off. as his wing is very powerful, yet as he has but little suppleness in his leg joints, he finds it difficult to rise when down, however if not instantly pursued, he finds no difficulty in carrying off geese and cranes. he also carries away hares, Lambs, and kids. and often destroys



fawns and calves, to drink their blood, and carries a part of their flesh to his retreat. Infants themselves, when left un-attended, have been destroyed by these rapacious creatures; which probably gave rise to the fable of Ganymede's being snatched up by an Eagle to Heaven.

An instance is recorded in Scotland of two children being carried off by Eagles.

but fortunately they received no hurt by the way; and the Eagles being pursued the children were restored unhurt out of the nests to the affrighted parents.

The Eagle is thus at all times a formidable neighbour: but peculiarly when bringing up its young. it is then that the female, as well as the male, exert all their force and industry to supply their young. Smith, in his history of Sherry, relates



that a poor man in that country got a comfortable existence for his family, during a summer of famine, out of an Eagles nest by robbing the Eaglets of food, which were plentifully supplied by the old ones. he protracted their assiduity beyond their usual time, by clipping the wings, and retarding the flight of the young.

It happened some time ago, in the same country, that a peasant resolved to rob the nest of an Eagle, that had built in a small island, in the beautiful Lake of Thillarny. he accordingly stripped, and swam in upon the island, while the old ones were away; and, robbing the nest of its young, he was preparing to swim back, with the eaglets tied in a string but, while he was yet up to his chin in the water, the old Eagles returned, and missing their young, quickly fell upon the plunderer, and, in



spite of all his resistance, dispatched him with their beaks and talons.

In order to extirpate these pernicious birds, there is a law in the Orkney Islands which entitles any person that kills an Eagle to a hen out of every house in the Parish in which the plunderer is killed. The nest of the Eagle is usually built in the most inaccessible cliff of the rock, it is said that the same nest serves the Eagle during life, and indeed the pains bestowed in forming it seems to argue as much. it is asserted, that as soon as the young ones are somewhat grown the mother kills the most feeble or the most voracious. if this happens, it must proceed only from the necessities of the parent. who is content to sacrifice a part to the welfare of the majority.





*The Common Crane.*



## Of The Crane

Willughby and Pennant make the Crane from five to six feet long. Others say, that it is about five feet high, and others that, it is as tall as a man. A bird however, the body of which is not much larger than that of a Turkey-hen, cannot easily be supposed to be almost as long as an Ostrich. Brisson therefore seems to give this bird its real dimensions, when he describes it about three feet high, and about four from the tip to the tail. the one from which this drawing was taken was however very near four feet high.

The Crane is a very social bird, and they are seldom seen alone. their usual method of flying or sitting is in flocks of fifty or sixty together, and while a part feed, the rest stand like sentinels upon duty.



It for the most part subsists on vegetables, and is known in every country of Europe except our own. As they are birds of Passage, they are seen to depart and return regularly at those seasons when their provisions invites or repels them.

They generally leave Europe about the latter end of Autumn, and return in the beginning of Summer. in the inland parts of the continent, they are seen crossing the country, in flocks of fifty or an hundred, marching from the northern regions towards the south. in these migrations however they are not so resolutely bent upon going forward, but that if a field of corn offers in their way, they will stop awhile to regale upon it: on such occasions they do incredible damage



chiefly in the night. and the husbandman who lies down in joyful expectation, rises in the morning to see his fields laid entirely waste, by an enemy whose march is too swift for his vengeance to overtake.

The cold Arctic region seems to be this birds favourite abode. they come down into the more southern parts of Europe rather as visitants than inhabitants. in their journey it is amazing to conceive the heights to which they ascend, when they fly. their note is the loudest of all birds, and is often heard, when the bird itself is entirely unseen, in the clouds. as it is light for its size, and spreads a large expanse of wing, it is capable of floating at the greatest height, where the air is lightest. and as it secures its safety



and is entirely out of the reach of man,  
 it flies in tracts which would be too  
 fatiguing for any other birds to move  
 forward in. In these Aerial Journeys  
 though unseen themselves, they have the  
 distinctest vision of every object below.  
 they govern and direct their flight by  
 their cries, and exhort each other to  
 proceed or descend when a fit opportuni-  
 ty offers for depredation.  
 in general it is a peaceable bird, both  
 in its own society, and with respect  
 to those of the forest. it is an animal  
 easily tamed, and if we can believe  
 Albertus Magnus, has a particular  
 affection for man.





The Whip snake.



Vipers are found in many parts of Europe, but the dry, stony, and in particular the chalky countries abound with them. This animal seldom grows to a greater length than two feet. The Viper differs from most other serpents in being much slower, as also in excluding its young completely formed. The kindness of Providence seems exerted not only in diminishing the speed, but also the fertility of this dangerous creature.

The Viper is capable of supporting very long abstinence, it being known that some have been kept in a box six months without food, yet during the whole time they did not abate of their vivacity. They feed only a small part of the year. but never during their confinement, for if mice, their favourite food, should at that time be thrown into their box, though they will kill, yet they will.



never cut them. when at liberty, they remain torpid throughout the winter, yet when confined, have never been observed to take their annual repose.

They are usually taken with wooden tongs, by the end of the tail, which may be done without danger, for while held in that position, they are unable to wind themselves up to hurt their enemy. yet notwithstanding this precaution, the viper catchers are frequently bitten by them. but by the application of Olive Oil, the bite is effectually cured.

The Whip Snake is still more venomous than any. this animal, which is a native of the East, is about five feet long yet not much thicker than the thong of a whip. This is Buffon's account, there are however



many varieties, differing both in colour and size  
 some are brown like the Drawing and not a  
 foot long, while others are spotted with  
 white green and blue. it is exceedingly ven-  
 erous, and its bite is said to kill in six  
 hours. One of the Jesuit Missionaries happen-  
 ing to enter into an Indian Pagoda, saw  
 what he took to be a whip cord lying on  
 the floor, and stooped to take it up. but  
 upon handling it, what was his surprise  
 to find that it was animated and no  
 other than the whip snake, of which he  
 had heard such formidable accounts. Fortune  
 however seemed favourable to him. for he  
 grasped it by the head, so that it had no  
 power to bite him. and only twisted  
 its folds up his arm. in this manner he  
 held it till it was killed.





*The Ringed Boa.*





*The Surinam Serpent.*

which some improperly call the Ammodontes  
 is equally harmless and desirable among  
 the savages of that part of the world.  
 they consider themselves as extremely  
 happy, if this animal comes into their



huts. The colours of this serpent are so many and beautiful, that they surpass all description, and these perhaps are the chief inducements to the savages to consider its visits as so very fortunate.

### The Crotalus







## The Puffin.

Like others of the same genus takes wing with great difficulty, and walks upon the whole length of the leg and foot, with a wriggling awkward gait. in Tempestuous weather it takes shelter in caverns, and holes in the nearest rocks, or in those made by the Rabbit on the beach, for these birds cannot brave the storm, and it is not uncommon



when they have been overtaken by it, to find them drowned and cast on shore. various kinds of fish, and sea weeds, are said to be the food on which they live. the life of these birds is very severe, but they may be tamed, and soon become familiar they are then fed on fish, and other animal substances. These birds are spread over various parts of the northern world, and are met with on almost all the rocky cliffs on the coasts of Britain and Ireland. and on many of the surrounding Isles, in immense numbers. It is said that the bill increases in size, as they advance in age.





### The White.

This bird is easily distinguished from the Buzzards by its forked tail, which is its peculiar, and distinguishing feature.



its length is about two feet.

it is common in England, and continues with us the whole year. it is found in various parts of Europe, in very northern Latitudes. Whence it retires towards Egypt before Winter in great numbers. it is said to breed there, and return in April to Europe, where it breeds a second time. contrary to the nature of rapacious birds in general. its flight is rapid and it soars very high in the air, frequently beyond the reach of our sight, yet at this distance it perceives its food distinctly, and descends upon its prey with irresistible force. its attacks are confined to small animals and birds,





The Hen Harrier.

The length from the point of the bill to the end of the tail 15 inches. it feeds on birds, lizards, and other reptiles. it breeds annually on the west, and on the shady precipices of the Roman wall by Cruglathes; it flies low skimming along the surface of the ground in



search of its prey. the female makes  
her nest on the ground.



The Goshawk.



This bird is somewhat longer than the  
 Buzzard, but more beautiful. M. De Buffon  
 who brought up two young birds of this kind  
 observes that the Goshawk, before it has  
 shed its feathers that is in its first year  
 is marked on the breast with brown spots  
 but after it has had two moultings they  
 disappear and their place is occupied  
 by transverse bars which continue during  
 the rest of its life. The Goshawk feeds  
 on mice and small birds, and eagerly  
 devours raw flesh. It is found in France  
 and Germany, it is not very common in this  
 country, but is more frequent in Scotland,  
 it is likewise common in North America  
 Russia, and Siberia. in Chinese Tartary  
 there is a variety which is mottled with



brown and yellow. They are used by the  
 Emperor of China in his sporting excursions,  
 when he is usually attended by his grand  
 Falconer and a thousand of inferior rank.  
 Every bird has a silver plate fastened to  
 its foot, with the name of the Falconer  
 who has the charge of it. that in case it  
 should be lost, it may be restored to the  
 proper person, but if he should not be found  
 the bird is delivered to another officer  
 called the Guardian of lost birds,  
 In former times, the custom to carry a  
 Hawk on the hand was confined to  
 men of high distinction, even the Ladies  
 in those times were partakers of this  
 gallant sport, at present this noble  
 diversion is wholly laid aside in this  
 country, the advanced state of Agriculture



which every where prevails, and the consequent  
 improvement and inclosure of lands, would  
 but ill accord with the Falconer, who requires  
 a large and extensive range of country  
 where he may pursue his game without  
 molestation to himself, or injury to his  
 Neighbour. The expence which attended  
 this sport was very considerable, which con-  
 fined it to Princes and men of the highest  
 rank. in the time of James I. Sir  
 Thomas Monson is said to have given a  
 thousand pounds for a cast of Hawks.  
 In the reign of Edward the third it  
 was made Felony to steal a Hawk,  
 such was the delight our Ancestors  
 took in this Royal sport. and such  
 were the means by which they endea-  
 voured to secure it. Besides the bird



just described, there are many others which  
 were formerly held in high estimation for  
 the sports of the field, these were principally  
 the Ser Falcon, the Falcon, the Lanner,  
 the Sacre, the Hobby, the Thestril, and  
 the Merlin, these are called the Long-  
 winged Hawks, and are distinguished  
 from the Gos Hawks, the Sparrow Hawk,  
 the Pute, and the Buzzards, which are  
 of shorter wing, slower in their motions  
 more indolent, and less courageous  
 than the others.







The Merlin is the smallest of all the  
 Hawk kind, scarcely exceeding the size of  
 a Blackbird. and although small, is not  
 inferior in courage to any of the Falcon tribe.  
 It was used for taking Larks, Partridges,  
 and Quails, which it would frequently kill  
 by one blow, striking them on the breast,  
 head, and neck. Buffon observes that  
 this bird differs from the Falcons, and  
 all the rapacious kind, in the male  
 and female's being of the same size.  
 The Merlin does not breed here, but visits  
 us in October, it flies low, and with  
 great celerity and ease, it preys on small  
 birds, and breeds in woods, laying  
 five or six eggs





The Jer-Falcon.

This elegant species equals the Goshawk



in size. This bird is a native of the cold and dreary climates of the North, and is found in Prussia, Norway, and Iceland. it is never seen in warm, and seldom in temperate climates, it is found, but rarely, in Scotland and the Orkneys.

Buffon mentions three varieties of the Jer-Falcon. next to the Eagle it is the most formidable, the most active, and the most intrepid of all voracious birds, and is the dearest and most esteemed for falconry. It is transported from Iceland and Prussia into France, Italy, and even into Persia and Turkey, nor does the heat of these climates appear to diminish its strength or blunt its voracity.





The Buzzard ..

M. Buffon distinguishes the *Falcons* and the Buzzards from the Eagles and Hawks by their habits and dispositions, which he compares to those of the Vultures, and



places them after those birds. though  
 possessed of strength, agility, and  
 weapons to defend themselves, they  
 are cowardly, inactive, and slothful,  
 they will fly before a Sparrow Hawk.  
 and when overtaken, will suffer them-  
 selves to be eaten, and even brought  
 to the ground, without resistance.

It feeds on birds, small Quadrupeds,  
 reptiles, and insects. Birds of this  
 species are subject to greater variations  
 than most other birds, as scarcely  
 two are alike, some are entirely  
 white, of others the head only is  
 white, and others again are mott-  
 led with brown and white.

---

V. B. The College Museum here begins.



The Giraffe or Caméléopard.





This Animal (the existence of which has frequently been called in question) is a native of the wild and unfrequented deserts of Ethiopia, and other interior parts of Africa, where it leads a solitary life, far from the habitations of men. it has hitherto been regarded chiefly as an object of curiosity, and may lead us to admire the wonderful production of that creative power which has filled the earth with life in such a boundless variety of forms.

The height of this extraordinary animal from the crown of the head to the ground is seventeen feet, and sometimes more. It is a timid and gentle creature but not swift, from the great length



of its fore legs, it is obliged to divide them to a great distance when it grazes, which it does with great difficulty, it lives chiefly by browsing on the leaves and tender branches of trees, its pace is a kind of gallop. This Animal was known to the Romans in early times, by whom its history has been handed down to succeeding ages in some of their most celebrated works of sculpture it was exhibited in their games among other rare and uncommon animals and is finely and justly described by Oppian. "The Camelopard says this Author has some resemblance to the camel: its head and ears are



small, its feet broad, and its legs long, but the height of the last is very unequal, the fore legs being much longer than the hinder which are very short, so that when the animal appears standing it has somewhat the appearance of a dog sitting, there are only two prominences upon the head, just between the ears, they resemble two small and straight horns. its mouth is like the stag's its teeth small and white, its eyes full of fire, its tail is short and furnished with black hairs at its end.

There is says Stabo "a large beast in



Ethiopia called *Camelopardalis*; although  
 it bears no resemblance to the Panther  
 for its skin is not spotted in the same  
 manner: the spots of the Panther are  
 orbicular, and those of this Animal  
 are long," Gillius's description seems  
 still better "I have seen, says he three  
 camelopards at Cairo. on their heads  
 are two horns, six inches long. this  
 animal is sixteen feet high. its neck  
 alone is seven feet, its fore and hind  
 legs are nearly of an equal height, but  
 the thighs before, are so much longer than  
 those behind, that its back seems to  
 slope like the roof of a house. its body  
 is sprinkled with large brown spots,  
 its feet are cloven like those of an Ox?"





The Sloth,

Of all animals, is the most sluggish



and inactive; and if we were to Judge from outward appearance, would seem the most helpless and wretched: all its motions seem to be the effect of the most painful exertion, which hunger alone is capable of exciting. it lives chiefly in trees; and having ascended one with infinite labour and difficulty, it remains there till it has entirely stripped it of all its verdure sparing neither fruit, blossom, nor leaf; after which it is said to devour even the bark: being unable to descend it throws itself on the ground, and continues at the bottom of the tree till hunger again compells it to renew its toils in search of subsistence.



its motions are accompanied with a most piteous and lamentable cry, which is its only defence, and secures it from the attacks of beasts of prey, which are said to quit it with horror upon hearing its cry. Though slow, awkward, and almost incapable of motion, the Sloth is strong, remarkably tenacious of life, and capable of enduring a long abstinence from food. We are told of one that, having fastened itself by its feet to a pole, remained in that situation forty days without the least sustenance. the strength in its legs and feet is so great, that having seized any



thing, it is almost impossible to oblige it to quit its hold. the same animal laid hold of a dog that was set loose upon it, and held him fast with its feet till he perished with hunger.

This race multiplies but little, every thing concurs, therefore, to their destruction, and the species supports itself with great difficulty.

They belong to the southern parts of the new Continent, and are never to be met with in the Old.

They cannot endure cold nor rain, the change from wet to dry, spoils their fur, which then resembles lappet-dressed hemp, rather than wool or hair.





*The Scarlet Ibis.*



\*

The Flamingo is the most remarkable of all the Crane kind, as well as the most beautiful.

This extraordinary bird is now chiefly found in America, but was once known on all the coasts of Europe. its beauty, its size, and the peculiar delicacy of its flesh, have been such temptations to destroy or take it, that it has long since deserted the shores frequented by man, and taken refuge in countries that are as yet but thinly peopled.

When the Europeans first came to America and coasted down along the African shores, they found the Flamingos on several shores on either continent, gentle, and no way distrustful of Man-kind. When the fowler had killed one, the rest of the flock, far from  
 \* this description was inserted by mistake.



attempting to fly, only regarded the fall of their companion in a kind of fixed astonishment: another and another shot was discharged; and thus the fowler often levelled the whole flock, before one of them began to think of escaping. But at present it is very different in that part of the world, and the Flamingo is not only one of the scarcest but of the shyest birds in the world, and the most difficult of Approach. They chiefly keep near the most deserted but also inhospitable shores; near salt-water Lanes and swampy Islands. When seen by mariners in the day, they are always drawn up in a long close line of two or three hundred.



together, and as Dampier tells us,  
 present, at the distance of half a mile,  
 the exact representation of a long British  
 wall. The flesh of the Old ones is hard,  
 that of the young one, is better. But of  
 all delicacies, the Flamingo's tongue  
 is the most celebrated. in fact the  
 Roman Emperors considered them as  
 the highest luxury; and we have an  
 account of one of them, who procured  
 fifteen hundred Flamingo's tongues to  
 be served up in a single dish.  
 They build their nests (which are no less  
 curious than the birds themselves) in exte-  
 =nsive marshes, and where they are in  
 no danger of surprise. The young ones if  
 taken from the nest, may be easily  
 tamed.





### *The Chevrotin.*

These Animals are of an elegant make and finely proportioned for their size. But though they leap and bound with prodigious swiftness, yet, apparently, they cannot continue it for a long time; for the Indians often hunt them down.



and the Negroes likewise pursue them, and  
 hunch them down with their sticks. they  
 are greatly hunted after, as their flesh is  
 excellent food. They can only live in  
 excessively hot countries, and they are so  
 exceedingly delicate, that it is with the  
 greatest trouble they are transported  
 into Europe alive, where they perish in  
 a short time. they are easily tamed,  
 very familiar and beautiful. the  
 Chevrotin is, without doubt, the least of  
 all cloven footed Animals. they are ex-  
 ceedingly numerous in the Indies, Java,  
 Ceylon, Senegal, Congo, and in every other  
 country that is excessively hot, and are  
 not to be found in America, nor in any  
 of the temperate climates of the Old Continent.



*The American Turkey.*





*an Egyptian Mummy in  
its coffin.*



a very small  
Egyptian Mummy  
in its coffin.



an ancient  
Vase  
found in the  
ruins of  
Herculaneum,



a Chinese  
Parasol.





*The nine-banded Armadillo.*



When a quadruped is mentioned, the very name carries the idea of an animal covered with hair; and yet Nature, as if willing to deviate from this characteristic uniformity, frequently astonishes us by uncommon productions.

The Quadruped Animals, which we look upon as the first class of living nature, and who are, next to man, the most remarkable beings of this world, are not superior in every thing, nor separated by constant attributes. The first of these characters, which constitutes their name, and which consists in having four feet is common to Lizards, frogs, &c. which however, differ from the Quadrupeds



in many other respects, so as to make a  
 separate class from them, the second ge-  
 =neral property, to produce young alive  
 is not peculiar to Quadrupeds, since  
 it is common with Whales and other  
 fishes of that class. and the third  
 attribute, that of being covered  
 with hair, exists not in several  
 species, which cannot be excluded  
 from the class of the Quadrupeds,  
 since, this characteristic excepted,  
 they agree with them in all other  
 respects. The Armadillo is found  
 only in South-America, where  
 there are several varieties of them.  
 They are all covered with a strong  
 crust or shell, and are distinguish-  
 =ed from each other by the number



of the flexible bands of which it is composed. It is a harmless inoffensive animal; feeds on roots, fruits, and other vegetables; grows very fat, and is greatly esteemed for the delicacy of its flesh. The Indians hunt it with small dogs, trained for that purpose. When surprised, it runs to its hole or attempts to make a new one, which it does with great expedition having strong claws on its fore feet with which it adheres so firmly to the ground, that, if it should be caught by the tail whilst making its way into the earth, its resistance is so great, that it will sometimes



leave it in the hands of its pursuers.  
to avoid this, the hunter has recourse  
to artifice; and by tickling it with  
a stick, it gives up its hold, and  
suffers itself to be taken alive.  
If no other means of escape be left,  
it rolls itself up within its covering  
by drawing in its head and legs,  
and bringing its tail round them  
as a band to connect them more  
forcibly together: in this situation  
it sometimes escapes by rolling  
itself over the edge of a precipice,  
and generally falls to the bottom  
unhurt.

The most successful method of catching  
Armadillos is by snares laid for them  
by the sides of rivers and places



where they frequent. they all burrow very deep in the ground and seldom stir out, except during the night, whilst they are in search of food.

The first I have chosen is the nine banded Armadillo, it has a tenth band, moveable half way up on each side: the shell on the shoulders and rump is marked with hexangular figures the breast and belly are covered with long hairs; its tail is long and taper; and the snout long and pointed.





Model of a  
Chinese Junk.



*The Flying Fish*



The Flying Fish abounds in the Tropical climates, it is a small animal, seldom growing above the size of a herring, and is the principle food of the Dorado. Nature has furnished each respectively with the powers of pursuit and evasion. The Dorado being about six feet long, yet not thicker than a salmon, and furnished with a full complement of fins, cuts its way through the Water with amazing rapidity: on the other hand, the Flying Fish is furnished with two and sometimes four fins, longer than the body, and these also moved by a stronger set of muscles than any other. This equality of power seems to



furnish one of the most entertaining spectacles those seas can exhibit. the efforts to seize on the one side, and the arts of escaping on the other, are perfectly amusing. The Dorado is seen, upon this occasion darting after its prey, which will not leave the water, while it has the advantage of swimming, in the beginning of the chase. But like a hunted hare, being tired at last, it then has recourse to another expedient for safety by flight. the long fins, which began to grow useless in the water, are now exerted in a different direction to that in which they were employ-



=ed in swimming: by this means the timid little Animal rises from the water, and flutters over its surface, for two or three hundred yards, till the muscles employed in moving the wings, are enfeebled by that particular manner of exertion.

By this time, however they have acquired a fresh power of renewing their efforts in the water, and the Animal is capable of proceeding with some velocity by swimming: still however, the active enemy keeps it in view, and drives it again from the deep; till at length the poor little creature is seen to dart



to shorter distances, to flutter with greater effort, and to drop down at last into the mouth of the fierce pursuer. But not the Dorado alone, all animated nature seems combined against this little fish, which seems possessed of double powers only to be subject to greater dangers. For though it should escape from its enemies of the deep, yet the Tropic-bird, and the Albatross are forever on the wing to seize it. Thus pursued in either element, it often seeks refuge in a new enemy and often whole shoals, fall on ship-board, where they furnish man with an object of useless curiosity.





Young Shark



No Fish can swim so fast as the shark,  
he outstrips <sup>the</sup> swiftest ships, such  
amazing powers, with such great ap-  
petites for destruction, as he possesses,  
would quickly unpeople even the ocean,  
but providentially the Sharks upper  
Jaw projects so far above the lower,  
that he is obliged to turn on one  
side (not on his back, as is generally  
supposed) to seize his prey. as this  
takes some small time to perform,  
the animal pursued seizes that  
opportunity to make its escape.  
Still, however, the depredations he  
commits are frequent and formidable.  
The shark is the dread of sailors in



all hot countries; where like a greedy robber, he attends the ships, in expectation of what may drop over board.

A man who unfortunately falls into the sea at such a time, is sure to perish.

A Sailor that was bathing in the Mediterranean near Antibes in 1744, while he was swimming about 40 yards from the ship, perceived a monstrous fish making towards him and surveying him on every side as fish are often seen to look round a bait, the poor man struck with terror at its approach, cried out to his companions in the vessel to take him on board. they accordingly threw him a rope with the utmost expedition, and



were drawing him up by the ship's side, when the Shark darted after him from the deep, and snapped off his leg. Mr. Pennant tells us that the master of a Guinea Ship finding a rage for Suicide prevail among his slaves, from a notion the unhappy creatures had, that after death they should be restored again to their families, and country; to convince them at least that some disgrace should attend them here, ordered one of their dead bodies to be tied by the heels to a rope, and so let down into the sea; and though it was drawn up again with great swiftness, yet in that short space



the shark had bitten off all but the feet. A Guinea Captain was, by stress of weather, driven into the harbour of Belfast, with a lading of very sickly Slaves who, in the manner above-mentioned took every opportunity to throw themselves overboard when brought upon deck, as is usual, for the benefit of the fresh Air. the Captain perceiving, among others, a woman Slave attempting to drown herself, pitched upon her as a proper example to the rest: he ordered her to be tied under her Arms, and so let down into the water, when the poor creature was thus plunged in, and



about half way down. She was heard to give a terrible shriek, which at first was ascribed to her fear of drowning, but soon after, the water appearing red all round her, she was drawn up, and it was found that a Shark which had followed the Ship, had bit her off from the shoulders.

The usual method of our Sailors to tame the Shark, is by baiting a great hook, with a piece of Beef or Pork, which is thrown out into the Sea by a strong cord, strengthened near the hook with an Iron chain. without this precaution, the Shark would quickly bite the cord in two and thus set himself free, having



darted at the bait, he swallows it, hook and all, when he finds the hook lodged in his maw, his utmost efforts are then exerted, but in vain, to get free: he tries with his teeth to cut the chain and almost seems to turn his stomach inside out, to disgorge the hook; in this manner he continues his efforts till quite spent, he suffers his head to be drawn above water, and the sailors confining his tail by a noose, in this manner draw him on board, and dispatch him. This is done by beating him on the head till he dies; yet even that is effected not without difficulty and danger; the enormous creature, terrible even in the agonies of



death, still struggles with his des-  
 =trayers, nor is there an animal in the  
 world harder to be killed,

another method of taking him is by  
 striking a barbed instrument, called  
 a Fijigig, into his body, as he brushes  
 along by the side of a Ship.

Nor is man alone the only enemy this  
 Fish has to fear: the Premora, or  
 Sucking fish, is a still greater and  
 follows the Shark every where. this  
 Fish has got a power of adhering to  
 whatever it sticks against, in the same  
 manner as a cupping-glass sticks to  
 the human body, it is by such an ap-  
 =paratus, that this animal sticks to  
 the Shark, drains away its moisture,  
 and produces a general and gra-  
 =dual decay.





*The Sucking Fish.*



*The Caméléon.*

Like the crocodile, proceeds from an egg,  
 The thickness of the body is different at  
 different times: for it can blow itself  
 up, and contract itself at pleasure,  
 The caméléon has the power of driving  
 the air it breathes over every part of  
 the body: however it only gets between



the skin and the muscles, for the muscles themselves are never swollen. But when the animal is removed into the sun, then comes the wonderful part of its history. at first, it appears to suffer no change of colour: but the whole surface soon seems to imbibe the rays of light; and the simple colouring of the body changes into a variety of beautiful hues, sometimes pale yellow, or vivid crimson, or green. when it is wrapped up in a white linen cloth for two or three minutes, the natural colour becomes much lighter; but not quite white as some Authors have pretended; however it must not hence be concluded, that the



lameleon assumes the colour of the objects which it approaches; this is entirely an error, and probably has taken its rise from the continual changes it seems to undergo.

it continually grasps by its tail, to what ever object it is near. it seldom opens its mouth, except for fresh air, and when that is supplied, discovers its satisfaction, by the frequent changes of its colour, the tongue is sometimes darted out after its prey, which it flies; and this is as long as the whole body. the eyes are remarkably little though they stand out of the head. but the most extraordinary part of their conformation is, that the



Animal often moves one eye, when the other is entirely at rest; nay sometimes one eye will seem to look directly forward, while the other looks backward; and one will look upwards while the other regards the earth.



An Antient Irish Urn in which they preserved the ashes of the dead. It is of an immense size, and was found in Munster.





The Rattle Snake. We have already given the description of  
this formidable creature at Page 50.





*The long footed snake*





Found in a bog, 12 feet deep near the  
ruins of Grey Abbey, in the Ardes  
County of Down.



The Lizard

It is no easy matter to tell to what  
class in nature Lizards belong,  
they are unjustly raised to the rank



of beasts, as they bring forth eggs, dispense  
 with breathing, and are not covered with  
 hair. they cannot be placed among fishes  
 as the majority of them live upon land,  
 they are excluded from the serpent-  
 tribe by their feet, upon which they  
 run with great celerity; and from  
 the insects, by their size; for though  
 the newt may be looked upon in this  
 contemptible light, a crocodile  
 would be a terrible insect indeed.  
 As Lizards thus differ from every  
 other class of Animals, they also  
 differ widely from each other. with  
 respect to size, no class of beings has  
 its ranks so opposite.



the colour of these animals also is very  
 various, as they are found of a hun-  
 dred different hues, green, blue, red,  
 chestnut, yellow, spotted, streaked, and  
 mottled, were colour alone capable  
 of constituting beauty, the Lizard  
 would often please: but there is  
 something so repulsive in the ani-  
 mal's figure, that the colours of its  
 scales only tend to give an air of  
 more exquisite venom, of greater ma-  
 lignity. the figure of these animals  
 is not less various; sometimes swollen  
 in the belly, sometimes pursed up  
 at the throat, sometimes with a  
 rough set of spines on the back, like  
 the teeth of a saw, sometimes with



teeth, at others with none; sometimes venomous, at others harmless, and even Philanthropic: sometimes smooth and even; sometimes with a long slender tail; and often with a shorter blunt one.

But their greatest distinction arises from their manner of bringing forth their young: some of them are viviparous; some are Oviparous; and some bring forth small spawn like fishes.

The Author laments his incapability of collecting the various species of Lizards, into one place, the Reader however by referring to Pages 4, 11, 41, 194, 212, 242, will find all the specimens the work affords





The Harp of Brien Borhoime, the arms



of the O'Briens, are on it, the sounding board is of oak, the Arm is of red-sally it had twenty strings, and is two feet, 8 inches high.



The Liath Meisicith of the Irish Druids, the box is composed of Tin, and is 7 inches long, and 5 broad,



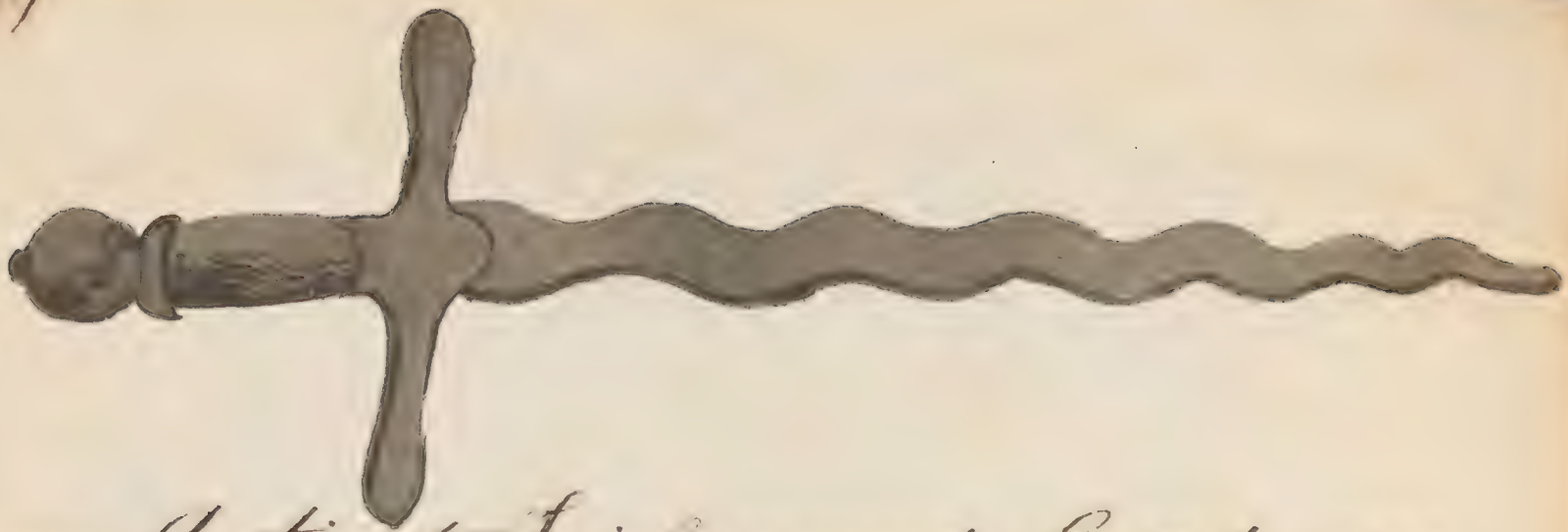


*an Indian Fan,*



*an antient  
Irish Bell,  
the hook, which  
held the tongue is  
still visible at  
the inside,  
it is six inches  
high.*

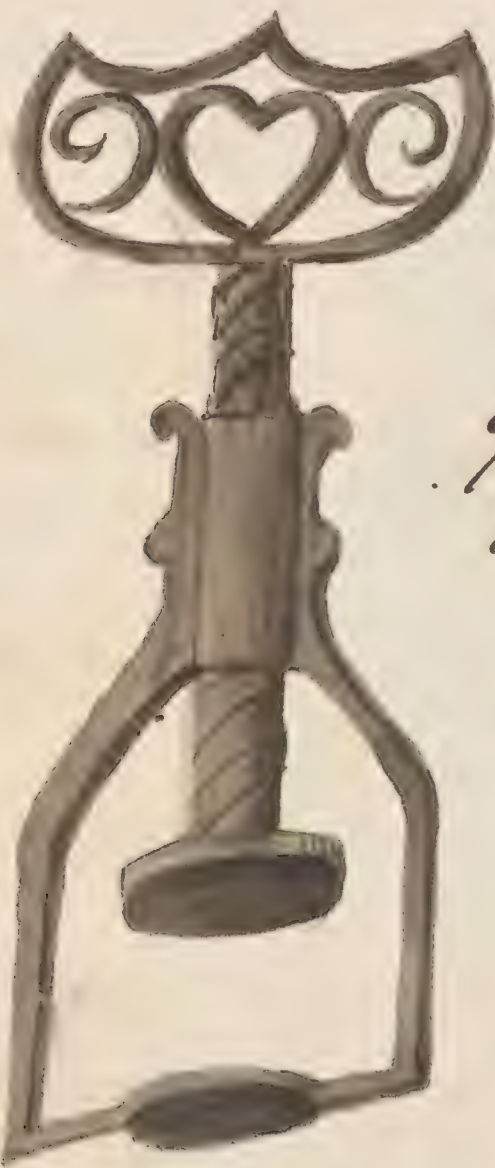




*an Antient Irish sword, found near  
Clontarf,*



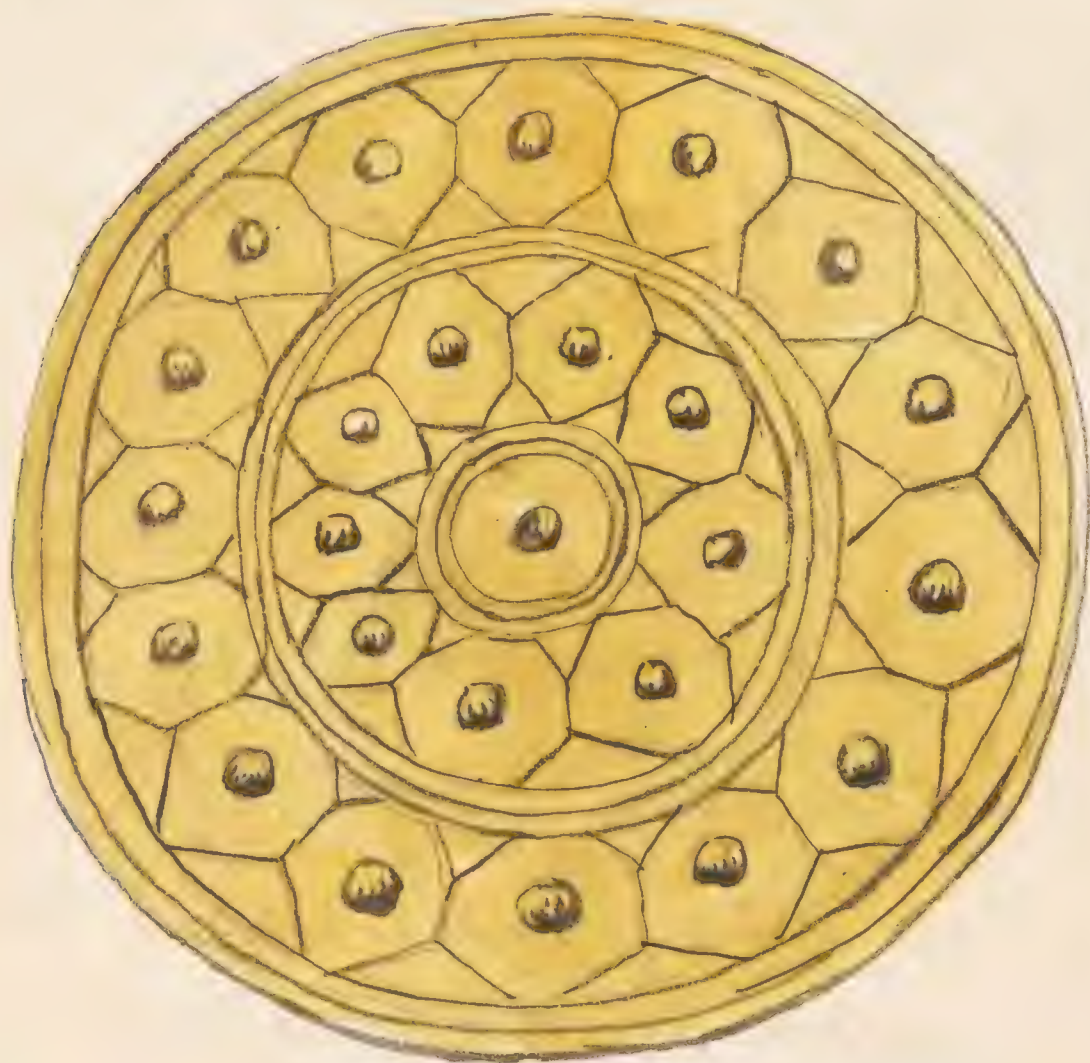
*Found in Munster, supposed to have  
been an instrument of music it  
is eleven inches long,*



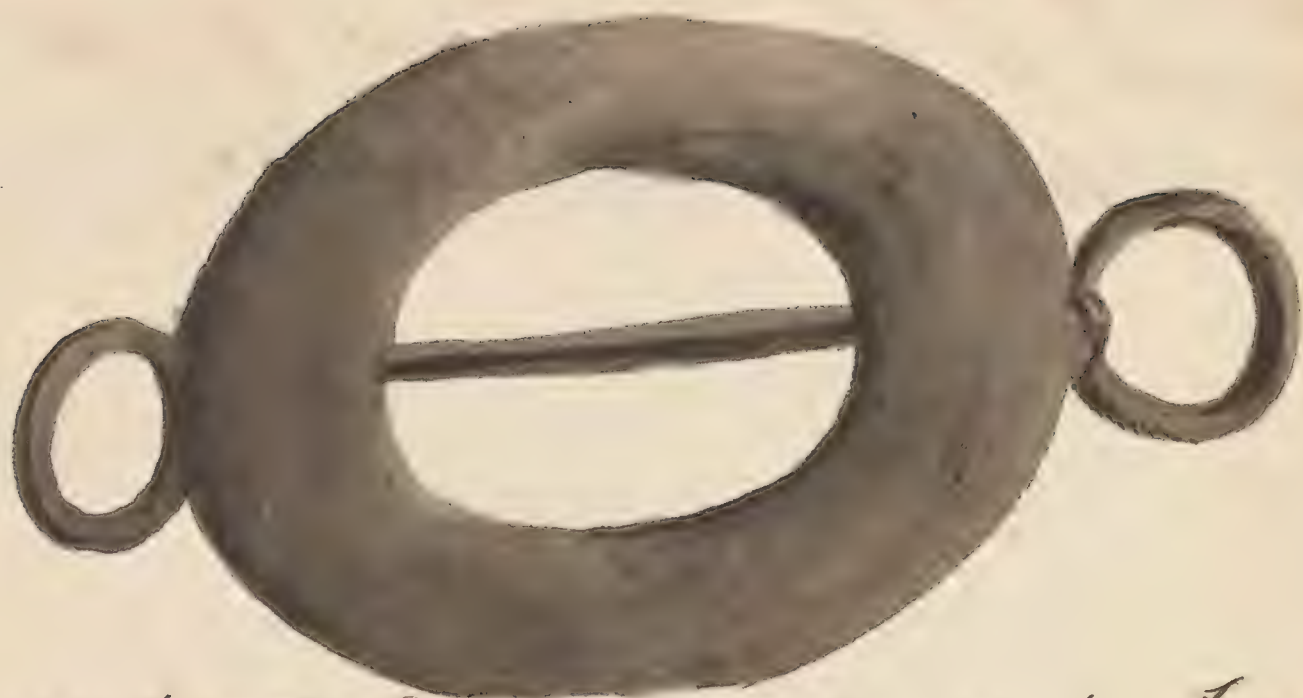
*a Thumb Screw,  
an instrument  
of Punishment with  
the Antient Irish,*



a pair of solid gold ornaments 168  
supposed to have belonged to the  
Antient Irish Druids,







*Antient Breast pin, found in Ireland*



*Curious Antique Vessel found in  
Ireland,*





a curious Antique Map of Dublin for the year 1610, correctly copied from the original, which is of the same size,



antient Irish instrument for drawing teeth, it is eight inches long,





The under jaw of a Wild Boar  
found in Ireland, the jaw is thir-  
teen inches long, and the tusks alone  
are 7 inches.



Ancient Brass Snuffers, found in  
Ireland.



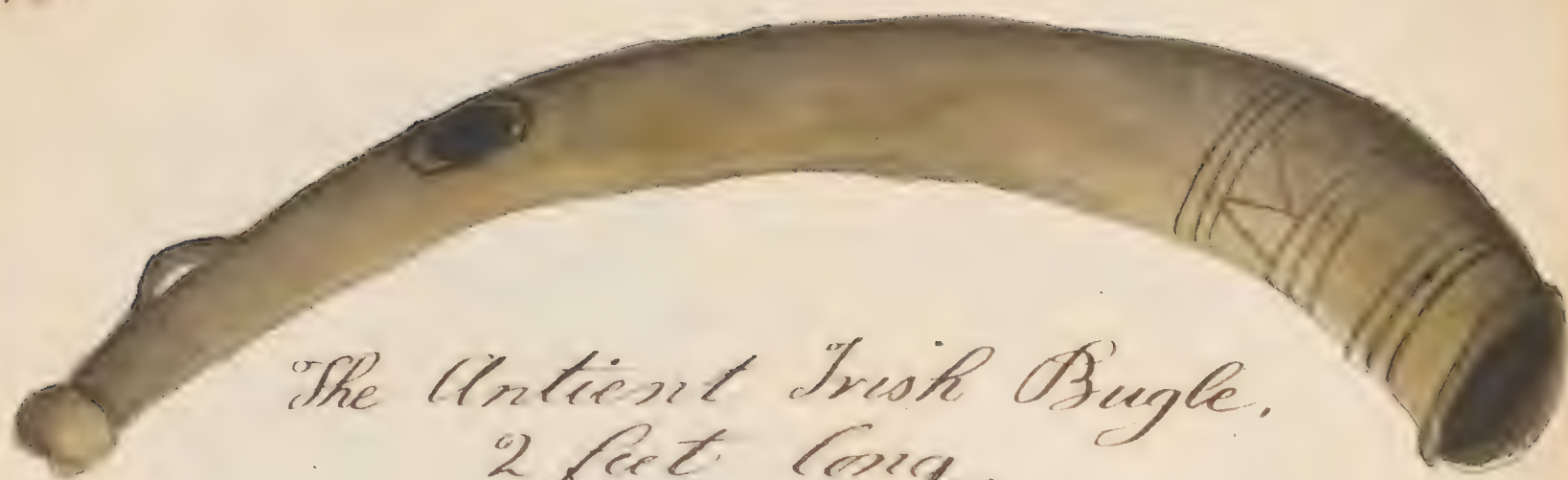


The Charter Horn, it is twenty one  
inches long.



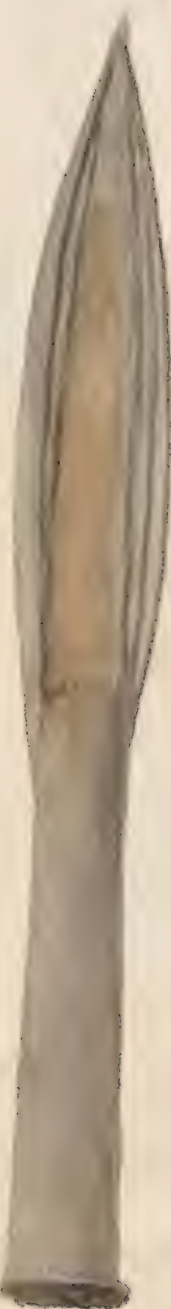
An antique ring, found in an old  
building at the rock of Lashed  
C<sup>o</sup>. Sipperany.





*The Antient Irish Bugle,  
2 feet long.*

*Antient Irish Spearheads*







Antient steel Breast Pin,  
 Found in Ireland  
 it is twelve inches long, so that  
 it served all the purposes of  
 a dagger,





This bottle must have been twice in the fire, being of green glass within and stained on the outside, its form is like the gourds of the East, which were used for bottles before the invention of glass by the Phenicians, — it was found at the bottom of a deep bog, near Phillarney,



Head of an Irish Arrow, made of flint it is three inches long,

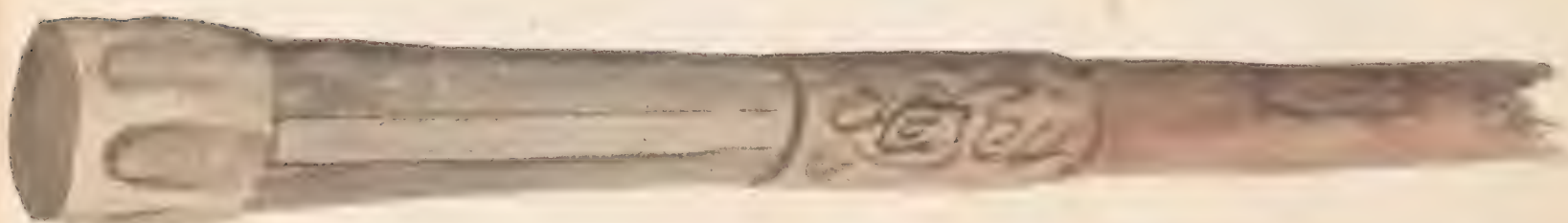




*This ornament belonged to the front of an  
Ancient Irish Helmet,*



*A Brass Seal, found along with the skeleton  
of an immense man, at Armagh,*



*Ancient Irish Truncheon, 16 inches long,*





A brass key found in the ruins of Burges Castle, County Wicklow, it is two inches long.



The Porcupine  
copied from a living animal, exhibited in London.



This animal, so formidable in its appearance, would be much more truly so, if it possessed the power erroneously ascribed to it, of darting its quills at its enemies, and killing them at a distance. though denied the privilege of making offensive war, it is sufficiently armed to resist the attacks of animals much more powerful than itself, the quills all incline backwards but on being the least irritated, the animal raises them up, making at the same time a snorting noise.

The Porcupine is found in India, Persia and Palestine: it is likewise common in all parts of Africa. The Indians hunt it for its quills, of which they make a kind of embroidery,



they also eat its flesh, which is tolerable good food,

There are Porcupines in a wild state in Spain and Italy, though they are not originally natives of any part of Europe, their flesh is sometimes exposed in the markets at Rome, The Italian Porcupines have shorter quills and a lesser crest than those of Asia or Africa the Porcupine in its domestic state is neither furious nor vicious, it is only anxious for its liberty, and with the assistance of its fore teeth which is sharp and strong, it easily cuts through a wooden prison. it will eat fruits, chestnuts and bread.





The Balearic, or Royal Crown Crane,



The Balearic Crane for a long time  
 continued unknown, till we became  
 acquainted with the birds of Tropi-  
 =cal climates, when this bird was  
 brought into Europe, and described  
 by Aldrovandus as Pliny's Bale-  
 =aric Crane. This bird comes from  
 the coast of Africa and the Cape de  
 Verd Islands. as it runs it stretch-  
 =es out its wings, and goes very swiftly  
 otherwise its usual motion is very  
 slow. in their domestic state, they  
 walk very deliberately among  
 other poultry, and suffer themselves  
 to be approached by every spectator,  
 They never roost in houses: but about



night when they are disposed to go to rest, they search out some high wall, on which they perch in the manner of a peacock. indeed, they so much resemble that bird in manners and disposition, that some have described them by the name of the Sea-Peacock. but, though their voice and roosting be similar, their food, which is entirely upon greens, vegetables, and barley, seems to make a wide difference. It is pretty nearly of the shape and size of the ordinary crane, with long legs and a long neck, like others of this kind. The above drawing was taken from a living bird, exhibited in Dublin.





*The Silver-headed Vulture.*

*copied from a living bird exhibited in Dublin,*



Vultures may be easily distinguished from all those of the Eagle kind, by the nakedness of their heads and necks, which are without feathers, and only covered with a very slight down, their eyes are more prominent; the claws are shorter, and less hooked, the inside of the wing is covered with a thick down, which is different in them from all others of the Rapacious tribe. They are still more strongly marked by their nature, which in all Vultures is cruel, unclean, and indolent. their sense of smelling, however is amazingly great; and Nature for this purpose, has given them



two large apertures without, and an extensive olfactory membrane within. They seem adapted inwardly, not only for being carnivorous, but to eat corn, or whatever of that kind comes in their way.

These birds, which are common in many parts of Europe, and but too well known on the Western Continent, are totally unknown in England. in Egypt, Arabia, and many other kingdoms of Africa, and Asia, Vultures are found in great abundance. the inside down of their wing, is converted into a very warm and comfortable



kind of Tur, and is commonly sold in the Asiatic markets. The sloth, the filth, and the voraciousness of these birds almost exceed credibility, in the Brazils where they abound, when they light upon a carcase, which they have liberty to tear at their ease, they so gorge themselves, that they are unable to fly; but keep hopping along when they are pursued. at all times they are a bird of slow flight, and unable readily to raise themselves from the ground; but when they have overfed, they are then utterly helpless; but they soon get rid of their burthen, for they have a method of vomiting up what they have eaten,



and then they fly off with greater facility, in Egypt they are commonly seen in company with the wild dogs tearing a carcass, very deliberately together, this odd association produces no quarrels; the birds and quadrupeds seem to live amicably, and nothing but harmony subsists between them. It is pleasant to be a spectator of the hostilities between animals that are thus hateful or noxious. Of all creatures, the two most at enmity, is the Vulture of Brasil, and the Crocodile. The female of this terrible amphibious creature, which in the rivers of that part of the world grows to the size of twenty-seven feet, lays its



eggs, to the number of one or two hundred in the sandy banks of the river, for this purpose, she carefully conceals the place where she deposits them, in the mean time, a number of vultures, sit, silent and unseen in some neighbouring forest, and view the crocodiles operations with the pleasing hopes of plunder. They wait untill she has retired, then all together pour down upon the nest hoon up the sand, and devour all without mercy.

These birds lay two eggs at a time, and produce but once a year, they make their nests in inaccessible cliffs, and in places so remote, that it is rare to find them.





*Flower-du-Vals*, from China, they are the same size as the Humming bird, and are copied from living birds, exhibited in Dublin



The Shell of a Sea Urchin, of this wonderful creature there are many kinds, some with spines as the Sea Hedgehog, others with a bony helmet



as the Ostracion, The Sea Orb is impregnable  
and is absolutely poisonous, if eaten.

190



The Sword Fish, from North America,



The Sword Fish is the Whale's most terri-  
 =ble enemy. "At the sight of this little  
 "Animal," says Anderson, "the Whale  
 "seems agitated in an extraordinary  
 "manner; leaping from the water as if  
 "with affright: wherever it appears  
 "the Whale perceives it at a distance  
 "and flies from it in the opposite  
 "direction. I have been myself"  
 "continues he "a spectator of their  
 "terrible encounter. the Whale  
 "has no instrument of defence ex-  
 "cept the tail; with that it en-  
 "=deavours to strike the enemy;  
 "and a single blow taking place,  
 "would effectually destroy its ad-  
 "=versary: but the Sword Fish is



as active as the other is strong, and easily avoids the stroke; then bounding into the air, it falls upon its enemy, and endeavours not to pierce with its pointed beak, but to cut with its toothed edges. the Sea all about is soon dyed with blood, proceeding from the wounds of the whale; while the enormous animal vainly endeavours to reach its invader, and strikes with its tail against the surface of the water, making a report at each blow louder than the noise of a cannon.



The Blue Shearwater, we have given a description of this  
 ternette (ternina) at Page 149 to which place we refer the  
 Reader





a lizard



The Tobacco Pipe Fish

The body in the thickest part, is not thicker than a man's thumb while it is two feet in length, it is overpassing for Buffon tells us, that an crushing one that was just taken, hundreds of very minute young ones were observed to crawl about.





The Violet Crab,  
 of the Caribbee Islands, is the most  
 noted, of all the Land Crabs, which  
 are widely different from those of  
 the water, and are in general na-  
 tives of the warmer regions of  
 Europe and are found in great



abundance in all the Tropical climates  
in Africa and America. The Violet  
Crab is possessed of two broad sharp  
teeth, with which they can easily cut  
leaves, fruits, and rotten wood, which  
is their usual food. but their prin-  
=cipal instrument for cutting and  
seizing their food, is their nippers,  
which catch such a hold, that the  
Animal loses the limb sooner than  
its grasp, and is often seen scarn-  
=pering off, having left its claw still  
holding fast upon the enemy, the  
faithful claw seems to perform its  
duty, and keeps for above a minute  
fastened upon the finger, while  
the crab is making off. in fact



it loses no great matter by leaving a leg or an arm, for they soon grow again and the Animal is found as perfect as before,

This however, is the least surprising part of this creature's history: and what I am going to relate, were it not as well known and as confidently confirmed as any other circumstance in Natural History, might well stagger our belief. These animals live not only in a kind of society in their retreats in the mountains, but regularly once a year march down to the sea side in a body of some millions at a time. As they multiply in great



numbers, they chuse the months of April or May to begin their expedition; and then sally out by thousands from the stumps of hollow trees, from the clefts of rocks, and from the holes which they dig for themselves under the earth. at that time the whole ground is covered with this band of adventurers; there is no setting down one's foot without treading upon them. the sea is their place of destination, and to that they direct their march in right-lined precision. no geometrician could send them to their destined station by a shorter course; they neither turn to the right nor to the left whatever obstacles intervene, and even if



they meet with a house, they will attempt to scale the walls to keep the unbroken tenor of their way. the procession sets forward from the mountains with the regularity of an army under the guidance of an experienced commander. they are commonly divided into three battalions; of which, the first consists of the strongest and boldest males, that like pioneers, march forward to clear the route and face the greatest dangers. these are often obliged to halt for want of rain, and go into the most convenient encampment till the weather changes. the main body of the army is composed of females, which never leave the mountains



till the ruin is set in for some time, and then descend in regular battalia, being formed into columns of fifty paces broad and three miles deep, and so close that they almost cover the ground. three or four days after this, the rear guard follows; a straggling undisciplined tribe consisting of males and females, but neither so robust nor so numerous as the former, the night is their chief time of marching but if it rains by day, they do not fail to profit by it. when the sun shines and is hot upon the surface of the ground, they then make an universal halt, and wait for the cool of the evening.

When after a fatiguing march, and escaping a thousand dangers, for they



are sometimes three months in getting to the shore, they have arrived at their destined port, they prepare to cast their spawn. the peas are as yet within their bodies, and not excluded, as is usual in animals of this kind, under the tail; for the creature waits for the benefit of the sea-water to help the delivery.

for this purpose, the Crab has no sooner reached the shore, than it eagerly goes to the edge of the water, and lets the waves wash over its body two or three times, they then deposit their spawn at the edge of the water, and once more seek the shore, leaving it to chance to bring it

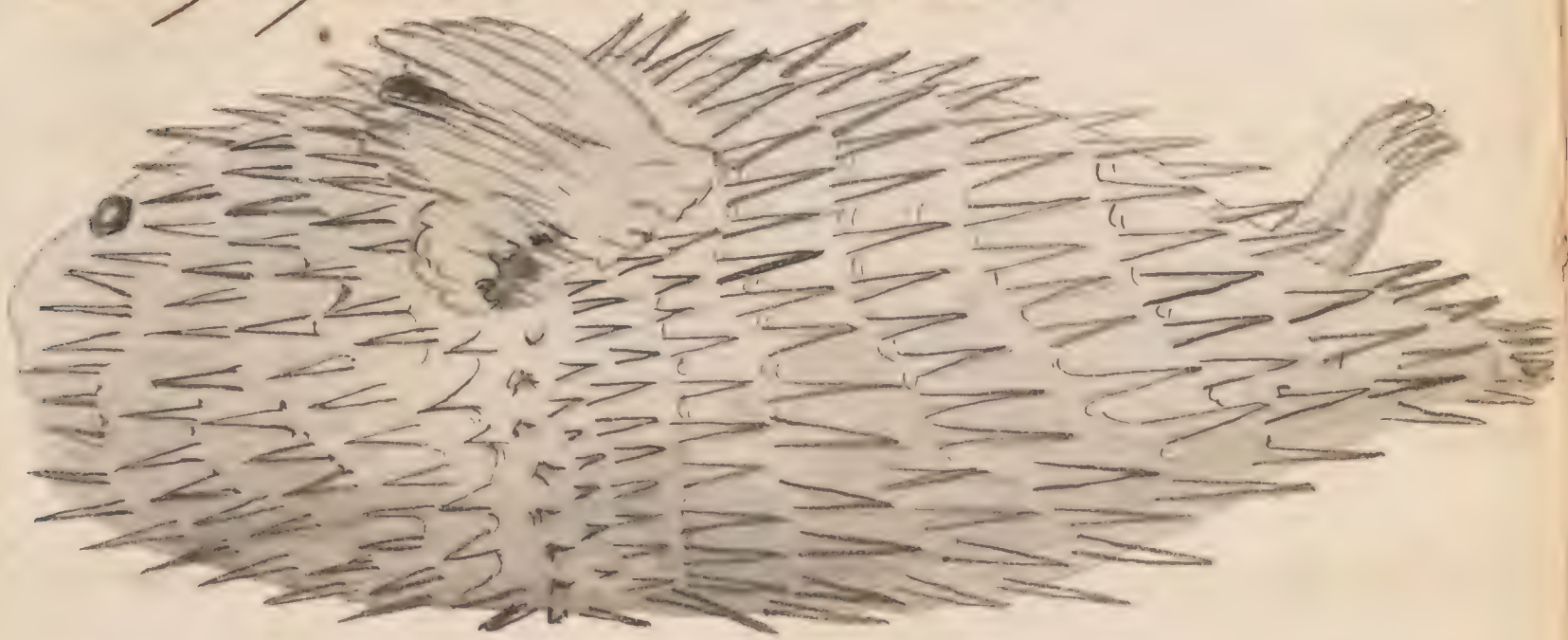


to maturity. at this time whole shoals of hungry fish are at the shore, and about two thirds of the Crab's eggs are immediately devoured by these rapacious invaders. the eggs that escape are hatched under the sand and soon after millions at a time of these little crabs are seen quitting the shore, and slowly travelling up to the mountains.

The old ones, however, are not so active to return; they have become so feeble and lean that they can hardly creep along, and the flesh at that time changes its colour. Most of them therefore are obliged to continue in the flat parts of the country till they recover, making holes in the ground, in these they throw off their



old shells which they leave as it were quite whole. at this time they are quite naked, and almost without motion for six days together, when they become so fat as to be delicious food. it is at that time that the animal is seen slowly making its way back; and all this is most commonly performed in the space of six weeks. the one from which the above drawing was taken, measured from the tip of the horn 15 inches.



*Echinus Marinus* — Sea Urchin  
eighteen inches long.





The Crocodile.



The Crocodile is an animal placed at  
 a happy distance from the inhabitants  
 of Europe, and formidable only in  
 those regions where men are scarce,  
 and arts are but little known. in  
 all the cultivated and populous  
 parts of the world, the great animals  
 are entirely banished, or rarely  
 seen. To look for this animal in  
 all its natural terrors, grown to  
 an enormous size, propagated in  
 surprising numbers, and committing  
 unceasing devastations, we must go  
 to the uninhabited regions of Africa  
 and America, to those immense  
 rivers that roll through extensive  
 and desolate kingdoms, where



arts have never penetrated, where force only makes distinction, and the most powerful animals exert their strength with confidence and security.

This terrible animal grows to a great length, being sometimes found 30 feet long, from the tip of the snout to the end of the tail; its most usual length however is 18. The Jaws shut one within the other, and nothing can be more false than that the animal's under jaw is without motion; it moves like the lower jaw in all other animals. There are in general sixty two joints in the back bone, which have sufficient play to enable the animal to



bend like a bow to the right and left, so that what we hear of escaping the creature by the animal's not being able to wheel readily after its prey, seems to be fabulous.

Such is the figure and conformation of this formidable animal, that unpeopled countries, and makes the most navigable rivers desert and dangerous. They are seen in some places, lying for whole hours and even days, stretched in the sun, and motionless; so that one not used to them, might mistake them for trunks of trees; but the mistake would soon be fatal, for



the torpid animal, at the near approach of any living thing, darts upon it with instant swiftness, and at once drags it down to the bottom. in the times of an inundation, they sometimes enter the cottages of the natives, where the dreadful visitant seizes the first animal it meets with. there have been several examples of their taking a man out of a canoe in the sight of his companions. Though not so powerful, yet it is very terrible even upon land. the Crocodile seldom, except when pressed by hunger, or with a view of depositing its eggs, leaves the water. when disappointed of its fishy prey, it



goes closer to the bank and there waits  
 covered up among the sedges in the  
 expectation of the dog, the bull, the Tiger,  
 or man himself, it seizes the victim  
 with a spring, and then drags it into  
 the water, and instantly sinks  
 with it to the bottom. sometimes it  
 happens that the creature, it has  
 seized, escapes from its grasp, wounded  
 and makes off from the river side,  
 in such a case, the Tyrant pursues  
 and often seizes it a second time, for  
 it runs with vast celerity, in this  
 manner it is sometimes seen above  
 half a mile from the bank, drag-  
 =ging the animal back to the river  
 side. where it feasts in security.



We are told of frequent combats between the Crocodile and the Tiger, it is when the Tiger approaches the river to drink, which they do very frequently that they are seized by the Crocodile and they die not unrevenged. the instant they are seized upon, they turn with vast agility, and force their claws into the Crocodile's eyes, while he plunges with his fierce antagonist into the river there they struggle for some time, till at last the Tiger is drowned.

The Crocodile's flesh is at best very bad eating, but the egg is to the natives, the most delicate morsel in the world.



The Rat-mouthed Fish,



The Horn Fish,



Star-Fish, found on the  
strand near Dublin,

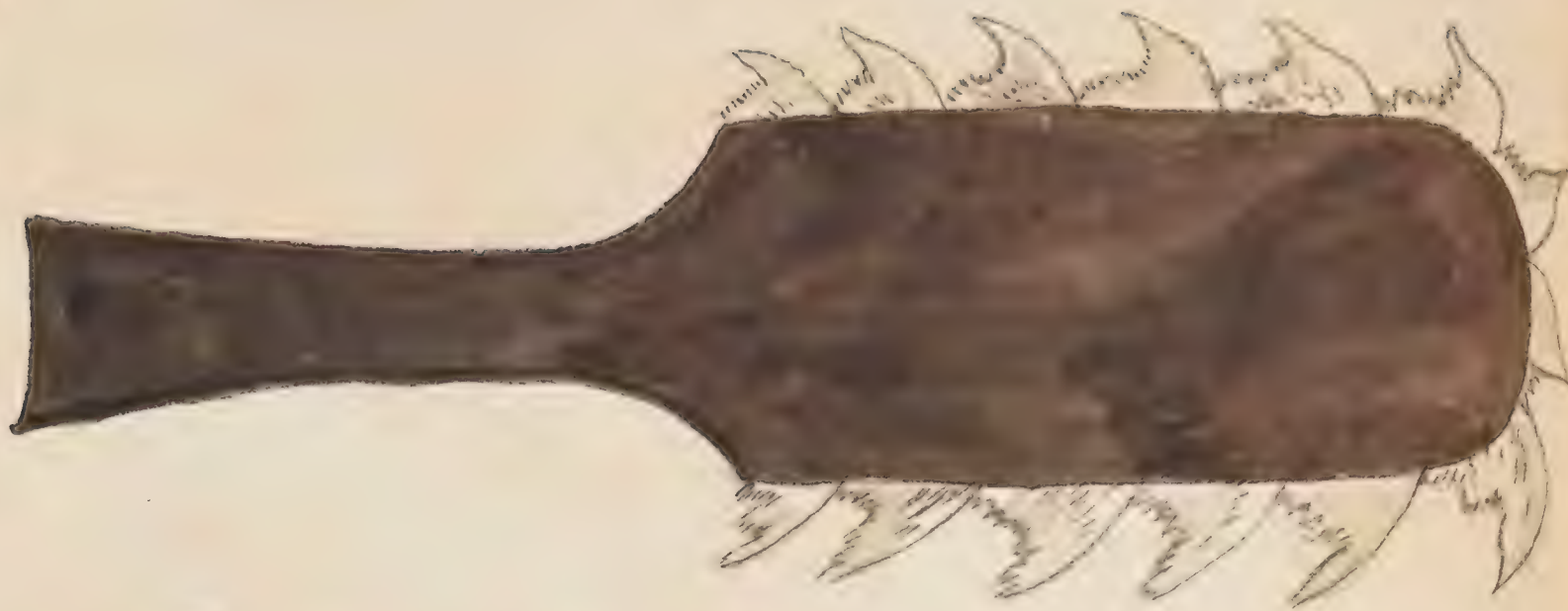






Lizards, they are the same size as the drawing, for description see Page 160.





A knife of the Sandwick Islands, it is of the same sort as Captain Cook was cut to pieces, with, it is of wood, except the teeth which are of bone, it is nine inches long,



Sauce boat, from King George's sound, it is of wood, and is 11 inches long,





A Flute, from Otakeite, it is said to be  
sounded from the performer's nose,



Drum, from Tongataboo, it is a hollow tube  
of bone, two feet in length,



An Adze from New Zealand,





The Paddle instrument held in the hand  
when dancing. from King George's Sound.



Pillow, of wood from Otaheite,



Fishing Hooks from New Zealand,  
they are of an immense size,





a Sauce-boat, from Shing George's Sound  
it is of wood and is ten inches long,



Sisking hook, from the Friendly Islands,



Head of a Whale Spear, from  
Shing George's Sound, the point is  
of shell,





*Mouth Organs, from the 'Friendly Isles,*



*Dancing man,  
carved in wood at the Sandwich Islands*



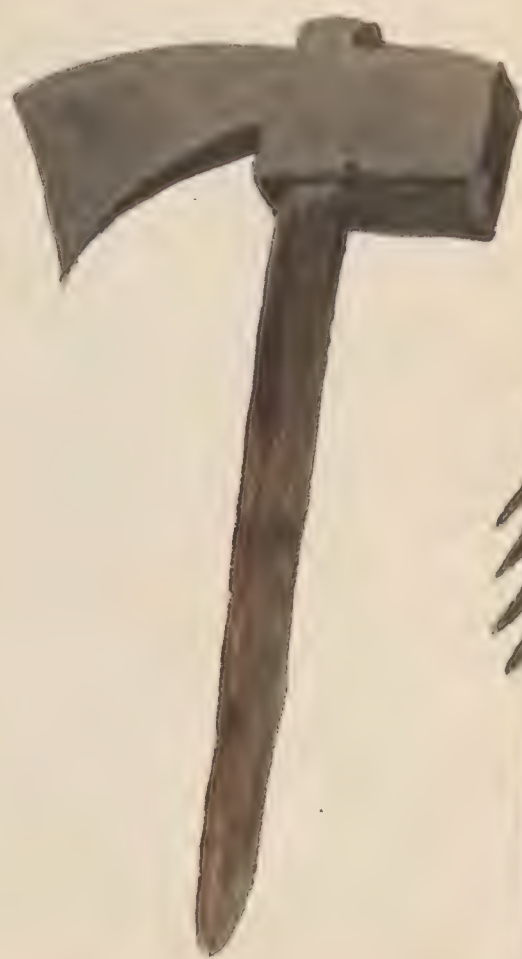
Model of  
a Roman Gutter,





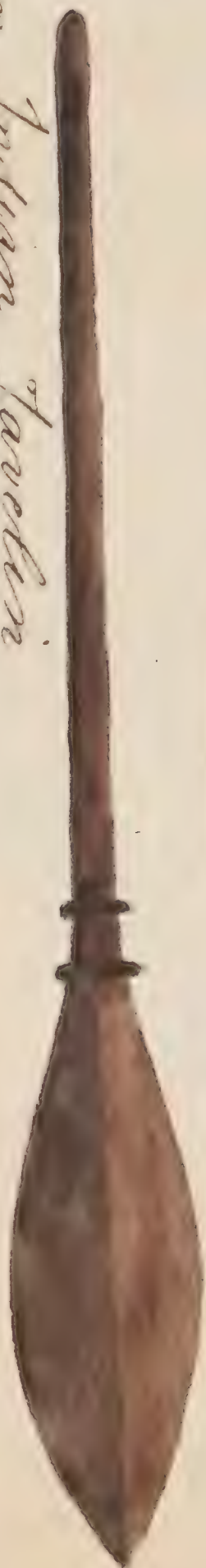
instrument for  
cutting wood, from  
Otaheite,

Indian  
Sommahawh,



an Indian spear, six feet long,

an Indian javelin  
five feet long,



Indian Clubs  
made of bone.  
they are a foot  
and a half long.

an Indian lance, twenty feet long,



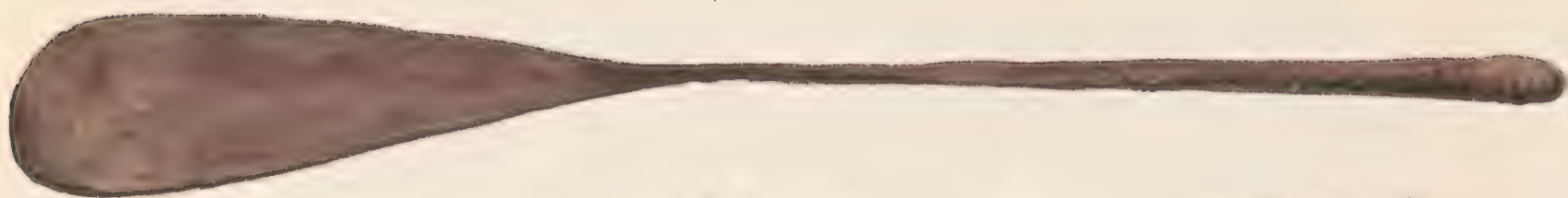






Dress of a Chief Mourner, from Otaheite,





*Instruments for tattooing from Otaheite,*



*a comb from New Zealand,*



*wooden comb, from New Zealand,*



223 Comb from King George's Sound



2<sup>nd</sup> from Clakite,



Bracelet, from the Sandwich Islands  
made of the tusks of Wild Boars,



Cap from the Marquesas Island,









*The Gold Head Traveller,*



The drawing of this extraordinary and  
 beautiful fish, which as far as I can learn  
 is a native of India, was taken from  
 one that had been caught off the coast  
 of Wexford, and had been brought to  
 Dublin, for the purpose of exhibition  
 although dead the colours were vivid  
 as it is possible to conceive, indeed if  
 the above drawing is deficient in any  
 respect, it is that the colour of the fins  
 and tail, falls short of the original, in  
 the glowing brilliancy of the red, it  
 measured two feet, from the nose to the  
 tail, and weighed nineteen pounds.  
 The name given it by the owner was the  
 Gold Head Traveller, which title the  
 Author was obliged to insert, as he  
 could not discover, any such fish, in any  
 of the Natural Histories, he had read,  
 under such circumstances, he trusts the  
 Reader will overlook the title if he should



be wrong, what render'd the above fish  
 the more remarkable, was, that it was  
 the only one which had been seen in  
 our Seas for upwards of 500 years, at  
 which period, tradition relates one to  
 have been caught,

Five small specimens  
 of the Cornu Amonis,





Head of the Horn bird,



Skull of a South Sea Porpoise, seventeen inches long,



Tooth of a Sea Horse, it is two feet five inches long,





Sooth of a Sea low, it is eight inches long



Two kinds of Mantle's, they are each six inches long,





### The Land Tortoise,

Tortoises are usually divided into those that live upon land, and those that subsist in the water, which latter are called Surtles, however Seba has proved that all Tortoises are amphibious, that the Land Tortoise will live in the water; and that the Sea Surtle can be fed upon land, The Land Tortoise is generally found from one to five feet long, its head the animal can put out and hide



at pleasure, under the great pent-  
 =house of its shell: there it can remain  
 secure from all attacks, though  
 peacable in itself, it is formed for  
 war in this respect, that it is almost  
 endued with immortality, nothing  
 can kill it, it will live though de-  
 =prived of the head, Tortoises are  
 commonly known to exceed eighty  
 years old; and there was one kept  
 in the Archbishop of Canterbury's  
 garden at Lambeth, that was  
 remembered above an hundred  
 and twenty. it was at last killed  
 by the severity of the frost, from  
 which it had not sufficiently defend-  
 =ed itself in its winter retreat,



which was a heap of sand, at the bottom of the garden. The Tortoise lays but a few number of eggs, if compared to the Sea Turtle, who deposits from an hundred and fifty, to two hundred in a season. The Tortoise deposits her eggs in a slight depression in the earth, which she previously scratches, and covering them with grass and leaves, she forsakes them to be hatched by the heat of the season. It is common enough to take these animals into gardens, as they are thought to destroy insects and snails in great abundance. We are even told, that, in hot countries, they are admitted into a



domestic state, as they are great  
destroyers of Bugs.

The Sea Tortoise, or Turtle,





The Sea Tortoise or Turtle, is generally found  
 larger than the former. The great  
 Mediterranean Turtle is the largest of  
 the Turtle kind with which we are  
 acquainted. it is found from five to  
 eight feet long, and from six to nine  
 hundred pounds weight; but, unluckily  
 its utility bears no proportion to its size,  
 as it is unfit for food, and often poisons  
 those who eat it. even the shell is unfit  
 for all purposes. one of these animals  
 was taken in the year 1729, at the mouth  
 of the Loire, in nets, that were not  
 designed for so large a capture. this  
 Turtle which was of enormous strength,  
 by its own struggles, involved itself in



the nets, in such a manner, as to be in-  
 -capable of doing mischief: yet even  
 thus shackled, it appeared terrible  
 to the fishermen, who were at first  
 for flying; but finding it impotent  
 they gathered courage to drag it on  
 shore, where it made a most horrible  
 bellowing; and when they began to  
 knock it on the head with their  
 gaffs, it was to be heard at half a  
 mile's distance, they were still  
 further intimidated by its nauseous  
 and pestilential breath, which so  
 powerfully affected them, that  
 they were near fainting, this anim-  
 -al wanted but four inches of being  
 eight feet long, its shell more <sup>resem-</sup>  
 -bled



leather, than the shell of a Tortoise, and it was furnished with teeth in each jaw like the shark, and it had a tail fifteen inches long, more resembling that of a quadruped than a Tortoise. These are a formidable and useless kind, if compared to the Turtle caught in the South Seas, and the Indian Ocean. These are of different kinds; not only unlike each other in form, but furnishing man with very different advantages. They are usually distinguished by Sailors into four kinds; the Trunk Turtle, the Loggerhead, the Hawksbill, and the Green Turtle, The Hawksbill Turtle, is the least of



the four, and has a long and small <sup>mouth</sup> somewhat resembling the bill of a Hawk, the flesh of this also is very indifferent eating; but the shell serves for the most valuable purposes. this is the animal that supplies the Tortoise shell, of which such a variety of beautiful trinkets are made. But of all animals of the Tortoise kind, the Green Turtle is the most noted, and the most valuable, from the delicacy of its flesh, and its nutritive qualities, it is generally found about two hundred weight; though some are five hundred, and others not above fifty,



This animal seldom comes from the sea but to deposit its eggs. its chief food is a submarine plant that covers the bottom of several parts of the sea not far from the shore. there the Turtles are seen, when the weather is fair, feeding on great numbers, like flocks of sheep, several fathoms deep upon the verdant carpet below. when the time for laying approaches, the female is seen working and digging in the sand with her fore feet, till she has made a hole, this done she lays eighty or ninety eggs at a time, each as big as a hen's egg, and as round as a ball, when the Turtle has done laying, she covers up the hole, and returns to the sea, and



leaves the eggs to be hatched by the heat of the sun, at the end of fifteen days, she lays about the same number of eggs again; and at the end of another fifteen days she repeats the same; in about twenty-four or twenty-five days after laying, the eggs are hatched by the heat of the sun; and the young Turtles, being about as big as Quails, are seen bursting from the sand, and running directly to the sea, but their strength being small the surges of the sea, for some days beat them back upon the shore, thus exposed, they remain a prey



to thousands of birds that then haunt the coasts; and these carry off the greatest part of them. There are several ways contrived for taking these animals, one way of taking them is by the harpoon, either when they are playing on the surface of the water, or feeding at the bottom. another way is still more successful a good diver places himself at the head of a boat, and when the Turtles are observed asleep on the surface, he quits the vessel, at about fifty yards distance, and keeping still under water, comes under the Turtle, seizes it by the tail and secures it.





## The Seal

Is found, with some variety, in almost every quarter of the Globe, its usual length is from five to six feet, it feeds on various kinds of fish, a young Seal yields above eight gallons of Oil, its flesh is sometimes eaten, the skin also is very valuable, the voice of the Seal has been compared to the hoarse barking of a dog, when young however it resembles the mewling of a cat.





Lizards, for description see Page 160.



243 here the College Museum, ends, the Dublin  
Society again begins,



The White Owl, Barn Owl, or Church Owl,



The Owl is distinguished, among birds of the rapacious kind, by peculiar and striking characters: unable to bear the brighter light of the sun, the Owl retires to some lonely retreat, where it passes the day in silence and obscurity; but at the approach of night, when all nature is desirous of repose, and the smaller animals, which are its principle food, are seeking their nestling places, the Owl comes forth from its lurking holes in quest of its prey. its eyes are admirably adapted for this purpose, being so formed as to distinguish objects with greater facility in the dusk, than in broad day light: its flight is rapid and silent during its nocturnal excursions



and it is then known only by its fright-  
-ful and reiterated cries, with which  
it interrupts the silence of the ni-  
-ght, during the day the Owl is  
seldom seen; but if forced from his  
retreat, his flight is broken and  
interrupted, and he is sometimes  
attended by numbers of small birds  
of various kinds, who seeing his  
embarrassment, pursue him with  
incessant cries; and torment him  
with their movements: the Jay,  
the Thrush, the Blackbird, the  
Redbreast, and the Titmouse, all  
assemble to hurry and perplex  
him. during all this the Owl  
remains perched upon the branch



of a tree, and answers them only with  
awkward and insignificant gestures,  
turning his head, his eyes, and his  
body, with all the appearance of  
mockery and affectation. all the  
species of Owls, however, are not  
alike dazzled and confused with  
the light of the sun; some of them  
being able to fly, and see distinctly  
in open day.

The White Owl is well known  
and is often seen in the most popu-  
-lar towns, frequenting churches,  
old houses, Maltings, and other  
uninhabited buildings, where it  
continues during the day, and



leaves its haunts in the evening in quest of its prey: its flight is accompanied with loud and frightful cries, whence it is denominated the Screech Owl: during its repose it makes a blowing or hissing noise, resembling somewhat the snoring of a man, it makes no nest, but deposits its eggs in the holes of walls, and lays five or six, of a whitish colour, it feeds on mice and small birds, which it swallows whole, and afterwards emits the bones, feathers and other indigestible parts, at its mouth, in the form of small round cakes, which are often found in the empty buildings which it frequents.





Common Horned Owl,





a Humming bird, in its nest.

Of this charming little animal, there are six or seven varieties, from the size of a small Wren, down to that of an humble Bee.

It is inconceivable how much these add to the high finishing and beauty of a rich luxurious Western landscape. as soon as the sun is risen, the Hummingbirds, of different kinds are seen fluttering about the flowers, without ever lighting upon them.

its wings are in continual motion, and this causes the humming sound, whence they have their name. The nests of these birds are not less curious than the rest, they are suspended in the air, at the



point of the twigs of an Orange, a Pomegranate or a Citron tree; sometimes even in houses, if they find a small and convenient twig for the purpose. the nest is about the size of an Hen's egg cut in two. they lay two eggs at a time, about the size of small peas. they are furnished with a forked tongue, that entering the cup of the flower, extracts its honey, upon which alone they subsist.

it is a doubt whether or not these birds have a continued note in singing. all Travellers agree that beside the humming noise produced by their wings they have a little interrupted chirrup; but Labat asserts, that they have a most pleasing melancholy melody in their voices.





The Female pheasant and Peit Shanant.



of the Pheasant,

These birds were originally brought into Europe from the banks of the Phasis, a river of Colchis, in Asia Minor whence they still retain their name. next to the Peacock, they are the most beautiful of birds, as well for the vivid colour of their plumes, as for their happy mixtures and variety. We are told that when Cræsus, king of Lydia, was seated on his throne, adorned with royal magnificence, and all the barbarous pomp of Eastern Splendour, he asked Solon if he had ever beheld any thing so fine! the Greek philosopher replied that after having seen the beautiful plumage of the Pheasant, he could be



astonished at no other finery. in fact  
 nothing can satisfy the eye with a  
 greater variety and richness of orna-  
 -ment than this beautiful creature.  
 The Pheasant, when full grown, seems  
 to feed indifferently upon every thing  
 that offers. it is even asserted by some  
 that such is the carnerverous dispositi-  
 -on of this bird, that when several  
 of them are put together in the same  
 yard, if one of them should fall sick  
 all the rest will fall upon it and  
 devour it. Of the Pheasant, as of  
 all other domestic fowl, there are  
 many varieties. there are White  
 Pheasants, Pencilled Pheasants,  
 Crested Pheasants, Pied Pheasants,



but of all others, the Golden Pheasant, from China is the most beautiful.

It is even a doubt whether the Peacock itself can bear the comparison.

The Pheasant, so beautiful to the eye, is not less delicate when served up to the table. its flesh is considered as the greatest dainty; and when the old Physicians spoke of the wholesomeness of the viands, they made their comparison with the flesh of the Pheasant. in the woods the hen Pheasant lays from eighteen to twenty eggs in a season; but in a domestic state she seldom lays above ten. in all the species the male is more beautiful than the female.





*The Little Grebe.*

This is the least of the Grebe tribe, and it is indeed a true aquatic, for it seldom quits the water. it is an excellent diver, and can remain a long while under water. it is found in almost



every lake, and sometimes upon rivers, but seldom goes out to sea, this species of the Grebe is an inhabitant of both Europe and America. The Grebes can take wing from the water, or drop from an eminence, and fly with great swiftness to a considerable distance; but when they happen to alight on the land, are very helpless they sit then with the body erect, and in attempting to regain the water, they awkwardly waddle forward in the same position; and if by any interruption they happen to fall on the belly, they sprawl with their feet, and flap their short wings as if they were



wounded, and may easily be taken by the hand, for they can make no other defence than by striking violently with their sharp pointed beak. they live upon fish, and it is said, also upon fresh water roots and sea weeds. the females build their nest generally in the holes of the rocky precipices which overhang the sea shores; and those which breed on Lakes, make theirs of withered reeds and rushes, they lay from two to four eggs at a time. the skins of these birds are highly esteemed, and a skin of one of the species sells as high as fourteen shillings.





The Water Ouzel.

This solitary species is chiefly found in the high and mountainous parts of the country, and always by the sides of brooks but particularly where they fall in cascades, where it may be seen perched on the top of a stone in the midst of the torrent, in a continual dipping



motion, whilst it is watching for its  
 food, which consists of small fishes  
 and insects. the feathers of this  
 bird are impervious to water, like  
 the Duck, but the most singular  
 trait in its character, (and it  
 is well authenticated) is that of  
 its possessing the power of walk-  
 =ing, in quest of its prey, on the  
 pebbly bottom of a river, in the  
 same way, and with the same  
 ease as if it were on dry land.  
 the female makes her nest in  
 the banks of the rivulet, of the same  
 materials as that of the Wren; and  
 lays four or five eggs.





*The Partridge,*

This bird is found chiefly in Temperate Climates; the extremes of heat and cold being equally unfavourable to them: they are nowhere in greater plenty than in these



Islands, where in their season, they contribute to our most elegant entertainments.

Partridges pair early in the Spring; the female lays from fourteen to eighteen or twenty eggs, making her nest of dry leaves and grass upon the ground.

The young birds learn to run as soon as hatched, frequently encumbered with part of the shell sticking to them.

It is no uncommon thing to introduce Partridge eggs under the common Hen, who hatches and rears them as her own.

In this case the young birds require to be fed with Ant's eggs, which is their favourite food: they likewise eat insects, and when full grown, feed on all kinds of grain and young plants.





*The French Partridge.*







The Curlew generally measures about two feet in length, they however differ much in size, as well as in the plumage. The Female makes her nest upon the ground, and lays four eggs of a greenish cast spotted with brown. The Curlew is met with by Travellers in most parts of Europe, from Iceland to the Mediterranean Islands. in Britain their summer residence is upon the large, heathy, boggy moors, where they breed. their food consists of worms, flies, and insects. in Winter they depart to the sea side, where they are seen in great numbers, their flesh which is highly esteemed while on the moors, then acquires a rank fishy taste.







The Mallard or wild Drake, weighs from thirty six to forty ounces, and measures twenty three inches in length.

the plumage of the female is very different from that of the male, and partakes of none of his beauties except the spot on the wings. She makes her nest, lays from ten to sixteen greenish white eggs, and rears her young, generally in the most sequestered mounds or logs, far from the haunts of man. Like the rest of the Duck tribes, the Mallards, in prodigious numbers, quit the north at the end of autumn, and migrating southward, arrive at the beginning of winter in large flocks



and spread themselves over all the  
 Loughs and marshy wastes in the  
 British Isles. they pair in the  
 Spring, when most of them again  
 retire northward to breed, but  
 many straggling pairs stay with  
 us, and rear their young, who  
 become natives, and continue  
 with us throughout the year.

many and various are the contri-  
 =vances which have been used in  
 both antient and modern times  
 to catch these wild, shy, and  
 wary birds, and from the avidity  
 with which the sport is still followed  
 it is hardly necessary to observe



how highly they are esteemed as a delicacy on the table. but to describe these various contrivances would swell out this history beyond its proper limits.



The Golden Oriole.







The Bernacle weighs about five pounds, and measures more than two feet in length, in severe winters, these birds are not uncommon in this Kingdom, particularly on the northern and western parts, where however they remain only a short time, but depart early in the spring to their northern wilds, to breed and spend the summer, to enumerate the curious and wild whimsies which all the old naturalists related concerning the propagation of these birds, would far exceed the limits of this work, to more copious histories we therefore refer the reader,







The Woodcock is migratory, and in different seasons is said to inhabit every climate: it leaves the countries bordering upon the Baltic in the Autumn on its route for this country. They must have the instinctive precaution of landing only in the night, for they are never seen to arrive; but are frequently found the next morning in any ditch which affords shelter. They do not remain near the shores to take their rest longer than a day, but <sup>are</sup> sufficiently recruited in that time to proceed inland, to the very same haunts which they



left the preceding season. in temperate weather they retire to the mossy moors, and bleak mountainous parts of the country, but as soon as the frost sets in, and the snows begin to fall, they return to lower and warmer situations. from the beginning of March to the end of that month, they all keep drawing towards the coast and avail themselves of the first fair wind to return to their native woods. the female makes her nest on the ground, generally at the stump of a decayed tree, she lays four or five eggs.





*the Snipe.*



The Snipe is migratory, and is met with in all countries: like the Woodcock, it shuns the extremes of heat and cold. in severe frosts and storms of Snow, driven by the severity of the weather, they seek the unfrozen boggy places, where they are sure to be found.

The female makes her nest in the most retired parts of the morafs, it is composed of withered grass, and feathers, her eggs, four or five in number, are of an oblong shape, and of a greenish colour with rusty spots, the Snipe is a very fat bird, it is much esteemed as a delicious dish, and is cooked in the same manner as the Woodcock,





The Starling,

Few birds are more generally known than the Starling, being an inhabitant of almost every climate. it is a familiar bird, and can be easily trained in a state of captivity. the female makes an artless nest in the hollows of trees, rocks, or old walls, she lays four or five eggs, in the winter



season these birds fly in vast flocks.  
 the evening however is the time that  
 they assemble in greatest numbers,  
 and betake themselves to the fens  
 and marshes, where they roost among  
 the reeds: so attached are they to  
 society, that they not only join those  
 of their own species, but also birds of a  
 different kind, and are frequently  
 seen in company with Piedwings,  
 Fieldfares, and even with crows, Jack-  
 =daws, and Pigeons. their principal  
 food consists of Worms, Snails, and  
 various kinds of grain, and are said  
 to be particularly fond of cherries.  
 The Starling is very docile, and may  
 easily be taught to repeat short phr-  
 =rases, or whistle tunes with great exact-  
 ness.





### The Quail.

These birds are almost universally diffused throughout Europe, Asia, and Africa; they are birds of passage, and are seen in immense flocks traversing the Mediterranean sea, from Italy to the shores of Africa in the Autumn, and returning again in the Spring, on the western coasts of the Kingdom.



of Naples such prodigious quantities  
 have appeared, that an hundred  
 thousand have been taken in a day  
 within the space of four miles.  
 from these circumstances it appears  
 highly probable, that the Quails  
 which supplied the Israelites with  
 food, during their journey through  
 the wilderness, were sent thither  
 on their passage to the north by  
 a wind from the south west, sweep-  
 -ing over Egypt and Ethiopia toward  
 the shores of the Red Sea. Quails  
 are not very numerous in these Islands  
 they breed, and many of them re-  
 -main with us throughout the year.  
 the female makes her nest like the  
 Partridge, and lays six or seven eggs  
 of a grayish colour, with brown spots,



it was owing to the quarrelsome disposition of this bird that Quails were formerly made use of by the Greeks and Romans as we use game cocks, for the purpose of fighting. we are told that Augustus punished a Prefect of Egypt with death, for bringing to his table one of these birds which had acquired celebrity by its victories. at this time the Chinese are much addicted to the amusement of fighting Quails, and in some parts of Italy it is said likewise to be no unusual practice this disposition is natural to them for while they are yet young if kept together, they fight obstinately with each other.







Of the Gull,

This genus, which some naturalists have described as consisting of about nineteen species, besides varieties, is numerously dispersed over every quarter of the Globe. they occasionally take a wide range over the ocean, and are met with by navigators many leagues distant from the land. their character is stigmatised as cowardly, cruel, lazy, thievish, and voracious, almost indiscriminately devouring whatever comes in their way, until they are obliged to disgorge, their overloaded stomachs. Some Ornithologists divide this genus of birds into two kinds, calling the larger Gulls, and the lesser Mews. The larger kinds are not so common in the warm as they are in



the cold climates, where they remain  
 to breed and rear their young, feeding  
 chiefly on the rotting carcasses of dead  
 Whales, which they find floating on  
 the Sea. in the temperate and cultivated  
 countries they occasionally leave the  
 Shores, and make excursions inland,  
 the jelly-like substance which is sometimes  
 met with in the fields, and known by  
 the name of Star-Shot, is believed to be  
 the remains of half digested worms, which  
 they have discharged from their overloaded  
 Stomachs. The Common Gull is the  
 most numerous of the Gulls which frequ-  
 =ent the British Shores. they breed on  
 the rocky cliffs: and lay two eggs near-  
 =ly of the size of those of a Hen.



The Caspary, copied from a living bird, exhibited in  
Dudlin.





The Cassowary was first brought into Europe  
 by the Dutch, from Java, in the  
 East Indies, formed for a life of  
 hostility, for terrifying others, and  
 for its own defence, it might be expected  
 that the Cassowary was one of  
 the most fierce and terrible animals  
 of the creation. but nothing is  
 so opposite to its natural character,  
 it never attacks others; and instead  
 of the bill, when attacked, it rather  
 makes use of its legs, and kicks like  
 a horse, or runs against its  
 pursuer, beats him down, and tread-  
 s him to the ground. the manner  
 of going of this animal is not less



extraordinary than its appearance. instead  
 of going directly forward, it seems to kick  
 up behind with one leg, and ~~then~~ making  
 a bound onward with the other, it goes  
 with such prodigious velocity, that the  
 swiftest racer would be left far behind.  
 The Laysanary swallows every thing that  
 comes within the capacity of its gullet.  
 The Dutch assert that it can devour  
 not only glass, Iron, and stones, but  
 even live and burning coals, without  
 feeling the smallest injury. the eggs  
 of the Laysanary are of a grey ash colour  
 the largest are found to be fifteen  
 inches round one way and about twel-  
 -ve the other. its natural climate is  
 the southern parts of the most eastern  
 Indies.





The Variegated Parrot, from South America  
copied from a living bird exhibited  
in Dublin,





The Ponanto bird, copied from a living  
bird exhibited in Dublin.





Common Grey Parrot, copied  
from a living bird, exhibited in Dublin.



The Thanguroo, copied from a living animal, exhibited in Berlin.





The Thanguroo, is a native of New Hol-  
 =land, where it was first discovered by  
 Sir Joseph Banks, it moves altogether  
 on its hind legs, making successive  
 bounds of ten or twelve feet with such  
 rapidity, as to outstrip the fleetest  
 Greyhound; it springs from rock to  
 rock, and leaps over bushes seven or  
 eight feet high, with great ease,  
 this animal is furnished with a pouch  
 similar to that of the Opossum; in  
 which its young are nursed and  
 sheltered, the animal from which  
 the above drawing was taken measur-  
 =ed five feet in length, from its contin-  
 =ual motion when erect the Author



was obliged to represent to him in a sitting posture.

The Small American Jay,





This bird is a native of the Molucca Islands, but found in greatest numbers in that of Aro, they live in large flocks, and at night generally perch upon the same tree, their flight is very rapid, and they are continually on the wing in pursuit of insects, their usual prey. as the country where they are bred has its tempestuous season, when rains and thunders continually disturb the atmosphere these birds are then but seldom seen.

The natives make a trade of killing and selling these birds to the Europeans, the Black bird of Paradise is the largest and rarest of these birds. We have given a drawing of the common bird at Page 24.







The Rozell Parrot,  
copied from a living bird, exhibited in  
Dublin.





The Cochinatee, copied from a living bird  
exhibited in Dublin.

296





Necklace Doves, from China, copied  
from living birds exhibited in F<sup>ub</sup>  
=lin.



a Java Sparrow, copied  
from a living bird exhi-  
=bited in Sullin,







The small Gorce Parrot, copied from a  
living bird, exhibited in Dublin,





The Small Horned Owl, from Hudsons:  
 Bay, copied from a living bird,  
 exhibited in Dublin.



The Magpie.





## of the Magpie.

This beautiful bird is very common in our islands, it is likewise found in various parts of the Continent, but not so far north as Lapland, nor farther south than Italy, it is met with in America, and is migratory there: it feeds like the Crow, on almost every thing animal as well as vegetable. The female builds her nest with great art, and lays seven or eight eggs, the Magpie is crafty and familiar, and may be taught to pronounce words, and even short sentences. it is addicted, like other birds of its kind to stealing, and will hoard up its provisions. it never undertakes distant journeys, but flies only from





### The Raven.

is the largest of its kind, and is well known in all parts of the World, and in times of ignorance and superstition, was considered as ominous, foretelling future events by its horrid croakings, and announcing



impending calamities. it is a very long-lived bird, and is supposed to live a century or more. it is fond of carrion, which it scents at a great distance; it is said that it will destroy rabbits, young ducks, and chickens; it has been known to seize on young lambs and pick out their eyes while yet alive. it may be rendered very tame and familiar, and has been taught to pronounce word: it is a crafty bird and will frequently pick up things of value, such as rings, money, &c. and carry them to its hiding place. it makes its nest early in the spring, and builds



in trees, laying five or six eggs of a pale green colour spotted with brown.



The White-faced Monkey, from Madras,  
copied from a living Original exhibited  
in Dublin.





White faced Ape, from the rocks of Gibraltar,  
copied from a living animal, exhibited  
in Dublin.



This is a numerous race, consisting of a greater variety of kinds, and making nearer approaches to the human species, both in form and action, than any other class of quadrupeds.

Montneys are found only in the warmest parts of the world and chiefly in the torrid zone. They abound in the woods of Africa, from Senegal to the Cape of Good Hope, and from thence to Ethiopia; in all parts of India and its isles; in the south of China; in Japan; and in South America, from the Isthmus of Darien as far as Paragway: a species or two are also met with in Arabia and the province of Barbary. On account of the



numbers and different appearances  
 of these animals, they have been di-  
 -vided into three classes viz. Apes,  
 Baboons and Monkeys, in the  
 Ape kind we see the whole strongly  
 impressed with the human likeness,  
 they walk upright, their legs have  
 calves, and their hands and feet  
 nearly like ours. in the Baboon, we  
 perceive a more distant resemblance  
 of the human form, they have short  
 tails, long faces, sunken eyes, are  
 extremely disgusting and fierce.  
 The Monkey kind are removed still  
 farther, and are much less, their  
 tails are longer than their bodies,  
 they are lively and active full of  
 frolic, greatly addicted to thieving



and fond of imitating human actions 308



Small Grey American Squirrels, copied  
from living animals exhibited in Dublin.

The Grey Squirrel is about the size of  
a young rabbit; it is common to both  
continents; in Sweden and other  
northern countries it changes its colour  
in the winter. it is very numerous  
in North America, and does irrede-  
-emable damage to the plantations;  
great flocks of them descend from  
the mountains, and lay waste the



fields of Maize, by eating the young  
 ears. a reward of three pence per  
 head was given for every one that  
 was killed; and such numbers  
 were destroyed in one year that  
 Pennsylvania alone paid in re-  
 wards the sum of 8000 £ of its cur-  
 rency. the Grey Squirrel makes its  
 nest in hollow trees, it lays up  
 stores of provisions in holes made  
 in the ground, these are often des-  
 troyed by Swine; and sometimes  
 so long covered with snow that  
 the Squirrels perish for want of fo-  
 od, they are easily tamed and  
 their flesh is esteemed very delicate.  
 the fur of these animals is very



valuable, and is imported under  
the name of *petit-gris*.

310



Green Macaw,  
copied from a  
living bird, exhibit-  
ed in Dublin,





*Sparrows from the Brazil's,*







## of the Heron.

In the breeding season these birds congregate in large societies, and like the Pooks, build their nest on trees, with sticks, lined with grass, wool, and other warm materials. the female lays from four to six eggs, a remarkable circumstance, with respect to these birds, occurred not long ago, at Dallam Tower, in Westmorland, the seat of Daniel Wilson, Esq:— There were two groves adjoining to the park: one of which, for many years, had been resorted to by a number of Herons, which there built and bred; the other was one of the largest Pookeries in the



country. the two tribes lived together  
 for a long time without any disputes.  
 at length the trees occupied by the  
 Herons were cut down in the spring  
 of 1775, and the young brood perished  
 by the fall of the timber. the parent  
 birds immediately set about prepar-  
 -ing new habitations, in order to breed  
 again; but as the trees in the neigh-  
 -bourhood of their old nests were only  
 of a late growth, and not sufficient-  
 -ly high to secure them from the  
 depredations of boys, they determ-  
 -ined to effect a settlement in the  
 Proomery. the Prooms made an ob-  
 -stinate resistance; but after  
 a very violent contest, in the cou-  
 -rse



of which many of the Prooms, and some of their antagonists, lost their lives, the Herons at last succeeded in their attempt, built their nests, and brought out their young. the next season the same contests took place, which terminated like the former, by the victory of the Herons. since that time peace seems to have been agreed upon between them; the Prooms have relinquished possession of that part of the grove which the Herons occupy; the Herons confine themselves to those trees they first seized upon,



and the two species live together in as much harmony as they did before their quarrel." Heysham.

The Heron is described by Buffon as exhibiting the picture of wretchedness, anxiety, and indigence, condemned to struggle perpetually with misery and want, and sickened by the restless cravings of a famished appetite. it is a silent and patient creature, and will, in the most severe weather, stand motionless a long time in the water, fixed to a spot, in appearance like the stump or root of a tree, waiting for its prey, which



consists of frogs, water-hennts, eels,  
 and other kinds of fish; and it is  
 also said that it will devour field-  
 mice. The Heron traverses the coun-  
 try to a great distance in quest of  
 some convenient or favourite fish-  
 ing spot, and in its aerial journe-  
 es soars to a great height, to whi-  
 ch the eye is directed by its harsh  
 cry, uttered from time to time  
 while on the wing. in flying it  
 draws the head between the  
 shoulders, and the legs stretch-  
 ed out seem, like the longer  
 tails of some birds, to serve the  
 office of a rudder. the motion of



their wings is heavy and flagging,  
and yet they get forward at a  
greater rate than would be imagin-  
-ed. in England Herons were for-  
-merly ranked among the royal  
game, and protected as such by  
the Laws. Heron Hawking was  
at that time a favourite diver-  
-sion among the nobility and  
Gentry of the Kingdom, at  
whose tables this bird was a  
favourite dish, and was as much  
esteemed as Pheasants and  
Peacocks. and whoever destroyed  
their eggs was liable to a penalty  
of twenty shillings.







The Seal is common in England in the winter months, but it is uncertain whether or not they remain throughout the year to breed, as is the case in France. The female makes a large nest among the reeds at the edge of the water, and lays six or seven eggs, of the size of those of a Pigeon. The Seal is highly esteemed for the excellent flavour of its flesh. It is known to breed and remain throughout the year in various temperate climates of the world, and is met with as far northward as Iceland in the summer.







The Shetrel is widely diffused through-  
 out Europe, and is found in the more  
 temperate parts of North America. it  
 breeds in the hollows of trees, and in  
 the holes of rocks, towers, and ru-  
 ined buildings; it lays four or  
 five eggs, its food consists of small  
 birds, field mice, and reptiles, it  
 was formerly used in Great Brit-  
 ain for catching young birds such as  
 Partridges. The male of this species  
 differs very much, in plumage from  
 the female, which is distinguished  
 from every other Hawk by its  
 beautiful and variegated pluma-  
 ge,







Long-Tailed Tertiia,





*The Widow bird,*



The Sumner





The Foumart, so called from its offensive  
 smell, as well as to distinguish it  
 from the Marten, to which it bears  
 a strong resemblance: it is likewise  
 called the Pole-cat or Sitchet, it is in  
 every respect admirably formed for that  
 peculiar mode of life assigned to it  
 by the all-wise Author of Nature. it is  
 a very active and nimble little  
 animal, runs very fast, and will  
 creep up the sides of walls with great  
 agility. it is very destructive to poultry;  
 Pigeons, and young game of all  
 kinds: it makes great havoc among  
 Rabbits; and its thirst for blood  
 is so great, that it kills many  
 more than it can eat. one or two of



these animals will almost destroy a whole Warren. it generally resides in woods or thick brambles; where it burrows under ground, forming a shallow retreat about two yards in length.

in the Winter season, this creature frequents houses, barns &c. feeding on Poultry, eggs, and sometimes milk. Perwich mentions a curious circumstance respecting these animals, viz. that during a severe storm, one of these animals was traced in the snow, from the side of a rivulet to its hole where upon opening it, eleven fine Eels were discovered to be the fruits of this curious little animal's nocturnal excursions. it may be



matter of curious investigation for  
 some future naturalist to enquire  
 by what arts this wily animal finds  
 a booty so apparently difficult to  
 attain: in attending to the instinct-  
 ive faculties of animals there is truly  
 much room for deep and diligent  
 enquiry: the female Fournart brings  
 forth in the summer, generally five  
 or six at a time, though the smell  
 of this animal is disagreeable even  
 to a proverb, yet the skin is dressed  
 and used as other furs, the Fournart  
 is a very fierce and bold little crea-  
 ture, and when attacked by a  
 dog will defend itself with great  
 spirit,



The Shoveler,





The Shoveler is less than the Wild Duck  
 the female makes her nest on the  
 ground, and lays ten or twelve eggs  
 it would appear, from the varied  
 descriptions of Ornithologists, that  
 these birds differ much from each other  
 in the markings of their rich-coloured  
 plumage. all however, agree in rank-  
 =ing the Shoveler among the most beau-  
 =tiful of the Duck Tribe; and it is also  
 in the opinion of many, inferior  
 to none of them in the delicate  
 flavour of its flesh. it has not  
 been ascertained whether they breed  
 in England, where indeed it is a  
 scarce bird; they are met with in  
 Scania and Gothland, and in Germa-  
 =ny, Russia and Shantschatha.



The Skunk,





## The Shunk.

This animal, which is called the Chinche by the natives of Brazil, is about the size of a common cat, it inhabits Peru and other parts of South America, and is remarkable above all the Weasel kind for a most intolerable, suffocating, fetid vapour which it emits from behind, when attached, pursued, or frightened, the stench of this effluvia is insupportable, and is the creature's best means of defence. Buffon mentions three or four varieties of this animal all of which possess this wonderful faculty. some turn their tail to their pursuers, and



emit a most horrible stench, which keeps both dogs and men at a distance. others eject this effluvia to the distance of eighteen feet; and it is of so virulent a quality, as almost to occasion blindness, if any of it should happen to fall into the eyes. clothes infected with it retain the smell for many days: no washing can make them sweet, but they must be even buried in fresh soil before they can be thoroughly cleansed. Dogs that are not properly bred, turn back as soon as they perceive the smell. but those that kill it, relieve themselves by thrusting their noses into the ground.



*The Monks, Capibara,*





The Great Black Woodpecker.







The Red-bellied Woodpecker, - *Certhia americana*.





The Woodpeckers.

These birds live chiefly upon the insects contained in the body of trees and for this purpose are furnished with a straight, hard, strong and



angular bill, made for piercing and boring. they have a tongue of a very great length; round, ending in a sharp, stiff, bony thorn, dentated on each side, to strike ants and insects when dislodged from their cells, their legs are short and strong for the purposes of climbing, their toes stand two forward and two backward; which is particularly serviceable in holding by branches of trees, and they have hard, stiff, tails, bending inwards, to lean upon when climbing.

Of this bird there are many kinds, and many varieties in each kind, they form large



colonies in the forests of every part of the World. They differ in size, colour, and appearance; and agree only in the manners above mentioned, or in those habits which result from so peculiar a conformation. the Woodpecker, however, does not confine its depredations solely to trees, but sometimes lights upon the ground, to try its fortune at an ant hill. the Woodpecker first goes to their hills, which it pecks, in order to call them abroad, it then thrusts out its long red tongue, which it can do to the distance of three or four inches from the bill, and which being like a worm, and



resembling their usual prey, the Ants  
 come out to settle upon in great num-  
 bers; however the bird watching the  
 properest opportunity, withdraws  
 its tongue at a jerk, and devours  
 the devourers. this stratagem it  
 continues till it has alarmed  
 their fears; or till is quite satisfied,  
 as the Woodpecker is obliged to ma-  
 -ke holes in trees to procure food,  
 so is it also to make cavities still  
 larger to form its nest and lay in.  
 This is performed, as usual, with  
 the bill; although some have affor-  
 -med that the animal uses its  
 tongue, as a gimblet, to bore with.  
 but this is a mistake; and those



that are curious may often hear the noise of the bill making its way, in large woods and forests. the Woodpecker chooses, however, for this purpose, trees that are decayed, or wood that is soft, like beech, elm, and Poplar. in these, with very little trouble, it can make holes as exactly round as a mathematician could with compasses. one of these holes the bird generally chooses for its own use, to nestle and bring up its young in. of these birds only three or four species is to be found in these countries viz. The Green, the greater Spotted, the middle Spotted, and the



343

Lesser Spotted Woodpecker,



Lesser Spotted Woodpecker.





*Yellow Spotted Woodpecker.*







the weaver.





The Female Golden-Winged, ~~Little Horned~~ <sup>Red</sup> Wood-Pecker,









This bird makes its appearance about the same time as the Quail, and frequents the same places. its well known cry is first heard as soon as the grass becomes long enough to shelter it, and continues till the grass is cut, but this bird is seldom seen, for it constantly shulks among the thickest parts of the herbage, and runs so nimbly through it, winding and doubling in every direction, that it is difficult to come near it. the Corn Crane leaves these islands in winter, and repairs to other countries in search of food, which consists of Worms, Slugs,



and Insects; it likewise feeds on  
Seeds of various kinds; it is very  
common in Ireland, and is seen  
in great numbers in the Island  
of Anglesea in its passage to that  
country. on its first arrival in  
England it is so lean as to weigh  
less than six ounces, from whence  
one would conclude that it must  
have come from distant parts;  
before its departure, however, it  
has been known to exceed eight ounces  
and is then delicious eating, the  
Female lays ten or twelve eggs, on  
a nest made of a little moss or  
dry grass carefully put together.





The Black Cuckoo. Blackbird,  
 is a solitary bird. frequenting woods  
 and thickets, chiefly of evergreens,  
 such as Pines, Firs, &c. especially



where there are perennial springs, which afford it both shelter and subsistence. They feed on berries, fruits, insects, and worms; they never fly in flocks like Thrushes; they pair early, and begin to warble sooner than any other of the songsters of the grove. The female builds her nest in bushes or low trees, and lays four or five eggs, of a bluish green colour. They are restless and timorous birds easily alarmed and difficult of access, they can easily however, be caught with bird-line, nooses, and all sorts of snares. They are never kept in aviaries, for when shut up with other birds, they pursue and harass their fellow captives unceasingly.



The Ring Dove, Cuckoo or Queest,





## The Ring Dove

This is the largest of all the Pigeon tribe and is very generally diffused throughout Europe: it is said to be migratory, their nest is composed of small twigs, so loosely put together that the eggs may be seen through it from below. the female lays two eggs, and is supposed to have two broods in the year. the Ring Dove has a louder and more plaintive sort of cooing than the common Pigeon, but is not heard except in pairing time, or during fine weather: when it rains or in the gloom of winter, it is generally silent. their flesh is excellent, and they feed on wild fruits, herbs, and grain of all kinds,





The Turtle Dove.



## The Turtle Dove

The note of this bird is singularly tender and plaintive: in addressing his mate, the male makes use of a variety of winning attitudes, cooing at the same time in the most gentle and soothing accents: on this account the Turtle Dove has been always represented as the most perfect emblem of connubial attachment. It arrives late in the spring, and departs about the latter end of August: it frequents the thickest and most sheltered parts of the woods, where it builds its nest on the highest trees: the female lays two eggs, and in this country has only one brood in the year. Turtles are pretty common in Shrewsbury, where they are sometimes seen in flocks of twenty or more.





*Lesser Butcher Bird,*





*The Loach,*





This seems to be the foremost of the wandering tribe of Fishes; and is only found in our northern part of the world. This animals chief place of resort is on the banks of New foundland, and the other sand banks that lie off Cape Breton. thither the Cod annually repairs in numbers beyond the power of calculation, to feed on the quantity of worms that are to be found there on the sandy bottom. and here they are taken in such quantities that they supply all Europe with provisions. when their provision there is exhausted, or the season for propagation returns, they go off to the polar seas, where they deposit.



The yellow-breasted Butcher Bird.



Red headed Butcher Bird.







Of the Butcher Bird.

Though these birds are small and of a delicate form, yet their courage, their appetite for blood, and their hooked bill, entitle them to be ranked with the boldest and the most sanguinary of the rapacious tribe. it is indeed



possessed of the most undaunted cou-  
 rage, and will attack birds much  
 larger and stronger than itself, such  
 as the Crow, the Magpie, and most  
 of the smaller kinds of Hawks, if  
 any of these should fly near the  
 place of its retreat. the Butcher-  
 Bird darts upon it with loud cr-  
 ies, attacks the invader, and  
 drives it from its nest. They will  
 chase all the small birds upon the  
 wing, and sometimes will ven-  
 ture to attack Partridges, and  
 even young Hares. Thrushes, Bl-  
 ack Birds, and such like, are  
 their common prey; they fix on  
 them with their Talons, split the



skull with their bill, and feed on  
them at leisure,  
The Purple Tanager, and a Bee-eater.





*The Quaker Bird.*



The Greyhound and Fox,





## The Greyhound Fox,

Is the largest, and is chiefly found in the mountainous parts of England and Scotland: he is likewise the boldest, and will attack a well-grown Sheep. This lively and crafty animal is common to every part of Great Britain, it sleeps much during the day; but the night is its season of activity, and the time when it roams about in search of prey. it will eat flesh of any kind, but prefers that of Hares, Rabbits, Poultry, and all kinds of birds. those that reside near the sea-coasts will for want of other food eat Crabs, Shrimps, Muscles, and other Shell Fish.



in France and Italy, the Fox does great damage among the Vineyards by feeding on the grapes, of which it is extremely fond. it boldly attacks the Wild Bees, and frequently robs them of their stores, although seldom with impunity the cunning of the Fox in surprising and securing its prey is equally remarkable: when it has acquired more than it can devour, its first care is to secure what it has killed, which is generally all within its reach. it digs holes in different places, where it conceals



its booty by carefully covering it  
 with earth to prevent a discovery.  
 The Chase of the Fox is a very fav-  
 ourite diversion in this Kingdom,  
 and is no where pursued with such  
 ardour and intrepidity. Both our  
 Dogs and Horses are confessedly  
 superior to those of any other cou-  
 ntry. the instant the Fox finds  
 he is pursued, he flies towards  
 his hole; and finding it stopped  
 which is always carefully done  
 before the chase begins, he has  
 recourse to his speed and his wun-  
 ning for safety, he does not dou-  
 ble and measure his ground



back like the Slave; but continues his course straight forward before the Hounds with great strength and perseverance. Both Dogs and Horses, particularly the latter, have frequently fallen victims to the ardour of the pursuit; which has sometimes continued for upwards of fifty miles, without the smallest intermission, and almost at full speed. as the smell of the Fox is very strong, the Dogs follow with great alacrity and eagerness, and have been known to keep up a continued chase for eight or ten hours together. The



Fox is the only one of the party  
 which has the plea of necessity  
 on his side; and it operates so  
 strongly that he often escapes  
 the utmost efforts of his pursuers  
 and returns to his hole in safe-  
 ty. when all his shifts have  
 failed him, and he is at last  
 overtaken, he then Defends  
 himself with great obstinacy,  
 and fights in silence till he is  
 torn in pieces by the Dogs.  
 There are three varieties of Foxes  
 in this island, which differ  
 from each other more in form  
 than in colour, viz. The Greyhound,  
 the Cur, and the Mastiff Fox.





The Peacock



## The Peacock.

Was originally brought from the distant provinces of India, and thence have been diffused over every part of the world. the first notice that has been taken of them is to be found in Holy Writ, viz the 2<sup>d</sup> Chron. 9. 21, where we are told they made part of the cargoes of the rich and valuable fleet which every three years imported the treasures of the East to Solomon's court. They are sometimes found in a wild state in many parts of Asia and Africa; the largest and finest are said to be met with in the neighbourhood of the Ganges, and on the fertile



plains of India; where they grow to a great size; under the influence of that luxuriant climate this beautiful bird exhibits its dazzling colours, which seem to vie with the gems and precious stones produced in those delightful regions. in former times they were considered as a delicacy, and made a part of the luxurious entertainment of the Roman Voluptuaries. The Peahen is less than the cock, and is destitute of those dazzling beauties which distinguish the male, she lays five or six eggs of a whitish colour. White Peacocks are not uncommon in England.



313

*Stoats,*





The difference in shape and colour between this animal and the Weasel is so small that they have frequently been described under the same denomination, the small Stoat being sometimes mistaken for that animal. In the most northern parts of Europe, this animal regularly changes its colour in winter, and becomes perfectly white; except the end of the tail, which remains invariably black. It is then called the Ermine; and is much sought after for its valuable fur, which makes a considerable article of



commerce in Norway, Lapland, Russia, and other cold countries, where they are found in prodigious numbers. they are also very common in Kamtschatka and Siberia where they are taken in traps baited with flesh. the skins are sold in the country for from two to three pounds sterling per hundred. The Stoat is likewise found white in the winter time in Great Britain, its fur however among us is of little value, they begin to change from brown to white in November, and resume their summer vesture in March.



its food like the Weasel consists of  
 young birds, Rabbits, mice, &c. its agili-  
 ty the same, and its smell equally fetid,



The Ermine.



The Hedge-Hog, or Brachura.





## The Hedge-Hog,

Destitute of every other means of defence is provided by Nature with a spinous armour, which secures it from the attacks of all the smaller beasts of Prey; such as Weasels, Martins, Polecats, &c. when alarmed, it immediately collects itself into the form of a ball, and presents on all sides a surface covered with sharp points, which few animals are hardy enough to engage. It generally resides in small thickets and hedges; lives on fruits, Worms, Beetles, and all kinds of insects; conceals itself in the day, and feeds during the night, it is easily taken, for



it neither flies nor attempts to defend itself; but when touched, shrinks into its circular form, which it will not easily quit while its enemies are near. The Hedgehog, in the Winter, wraps itself up in a warm nest, made of moss, dried grass, and leaves; and sleeps out the rigours of that season. it is frequently found so completely encircled with herbage, on all sides that it resembles a ball of dried leaves. when taken out and placed before a fire, it soon recovers from its torpid state, when frightened its smell is very offensive.





### The Shrew Mouse,

Frequents old walls and heaps of stones,  
 feeds on insects, corn, and putrid subst-  
 ances. it has so strong and disagreeable  
 a smell, that the cat, after she has  
 killed, refuses to eat it, it forms its  
 nest of dry grass and moss on the surface  
 of meadows or pastures, and is said  
 to breed four or five young at a time.  
 there seems to be an annual mortality  
 of these animals in August; numbers  
 of them being found dead in the  
 fields, highways. &c. about that time.



*The Beaver*





Is found chiefly in the northern parts of Europe, Asia, and America, particularly the latter, from whence many thousands of their skins are annually brought into Europe. in 1763, the Hudson's Bay company sold at one sale 54,670 Beaver skins. they vary greatly in colour. It would be deviating too far from the object of this work were we to relate all the wonders told of this industrious Animal, and the manner of building its habitation, to more copious works we therefore refer the Reader. The Beaver's cutting teeth are so large and strong, that it can gnaw down trees of great magnitude with ease.



During summer, they feed on leaves, fruits, and sometimes crabs or cray-fish; but fish is not their favourite food. their time of building is early in the summer: in Winter they never go farther than to their provision stores; and, during that season are very fat. they breed once a year, and bring forth two or three at a birth.



The Bat.

Averse to the society of all other creatures, it shuns the light, inhabiting



none but dark and gloomy places, to which, after their nocturnal excursions, they are sure to return by break of day, and in which they remain, fixed, as it were to the walls till night again approaches. their flight is far from being either rapid, or very direct, it is performed by hasty vibrations in an oblique and winding direction; and in passing along they do not fail to seize all the Gnats, Moths, and other nocturnal insects that come in their way. and these they swallow entire.

Like quadrupeds, the Bat brings forth its young alive, they raise themselves from the ground with difficulty and never soar to a great height,



it is affirmed that these animals  
 do not produce more than two at  
 a birth, and that these they  
 suckle, and even carry along with  
 them as they fly. they unite in  
 numbers to defend each other from  
 the cold; they pass the winter with-  
 out awaking, without stirring,  
 and without eating, from the end  
 of Autumn till Spring. they belo-  
 ng to the number of carnivorous an-  
 imals; for they will devour bacon,  
 and meat of all kinds, whether  
 raw or roasted, whether fresh or  
 corrupted.





The Hamster, or German Marmot,  
 Although the qualities of this animal  
 are sufficiently noxious to render it an  
 object of universal detestation, in the  
 countries where it abounds; yet when  
 considered with regard to those instin-  
 =cts which conduce to its own support, it  
 well deserves our highest admiration,  
 its habitation is curious, and constructed  
 with great art, it contains a variety  
 of apartments, the first entrance is



formed in an oblique direction, at the end of which the male sinks a perpendicular hole, which he reserves for his own use. the female makes several for herself and family, one of the holes is lined with straw, and serves as a lodging; the others contain provisions, of which great quantities are always accumulated during the time of harvest. they begin to lay in their stores in august. to facilitate the transportation of their food, nature has furnished them with two pouches in each cheek, into which they cram Corn, Beans, or Pease, till they seem ready to burst, and on their return to their holes empty them, by pressing their two



fore feet against their cheeks. The old Hamsters often amass an hundred pounds weight of grain. at the approach of Winter they retire into their subterraneous abodes, the entry to which they shut up with great care. there they remain in perfect tranquillity, and feed on their provisions till the frost becomes severe, when they sink into a torpid state, in which they continue till the return of Spring. During this period, if any of the holes be opened, the Hamster is always found lying upon a bed of soft straw, with its head turned under its belly, between the two fore legs, whilst the hind ones rest upon the muscle, its eyes are shut, nor can any sign of life be perceived. the females bring forth twice or thrice a year, each litter



consisting of six or eight, their increase  
 is so rapid in some years, as to be almost  
 sufficient to occasion a dearth; but the  
 ferocity with which they upon all occa-  
 sions attack and devour each other is  
 so great, as to be the happy means of  
 preventing the ill effects of their  
 fecundity. and he even often att-  
 acks animals much superior to him-  
 self in strength, the Hamster is  
 found in various parts of Germany,  
 Poland, and Ukraine. the Pole-cat  
 is its greatest enemy; it pursues  
 the Hamster into its hole, and des-  
 troys great numbers. the skin  
 of this animal is held in high esti-  
 mation.







## The Jay.

Is a very common bird in Great Britain, and is found in various parts of Europe. It builds in woods, and makes an artless nest, composed of sticks, fibres, and tender twigs: the female lays five or six eggs, of a grayish ash colour spotted with brown. They live on Acorns, nuts, seeds, and various kinds of fruits: they will eat eggs, and sometimes destroy young birds in the absence of the old ones. When kept in a domestic state they may be rendered very familiar, and will imitate a variety of words and sounds. It is easily distinguished in the woods by its harsh, grating, voice,







## The Fallow Deer.

With some variety, is found in almost every country of Europe. in the rutting season the males bellow frequently, but with a low and interrupted voice. they are not so furious at this season as the Stag. The Fallow Deer is easily tamed, feeds on a variety of things which the Stag refuses, and preserves its condition nearly the same throughout the year, although its flesh is esteemed much finer at particular seasons.

the female goes with young eight months; and produces one, sometimes two, and rarely three at a time. they arrive at perfection at the age of three years, and live about twenty. We have two varieties of



the Fallow Deer, the beautiful spotted kind  
supposed to have been brought from Bengal  
and the deep brown sort, now common in this  
country. These last were introduced by  
King James the first out of Norway;  
where having observed their hardiness  
in bearing the cold of that severe climate,  
he brought some of them into Scotland,  
and from thence transported  
them into his chases of Enfield and  
Epping, since that time they have multiplied  
exceedingly in many parts  
of this Kingdom, which is now become  
famous for venison of superior fatness  
and flavour to that of any other country  
in the world. The Fallow Deer  
is found in almost every country of  
Europe.



*The Pontado, or Guinea Hen,*





Is now very common in this country, it was originally brought from Africa, from whence it has been diffused over every part of Europe, the West Indies, and America; it formed a part of the Roman Banquets, and is now much esteemed as a delicacy, especially the young birds. the Female lays a great number of eggs, which she frequently secretes till she has produced her young brood. the egg is smaller than that of a common Hen, and is very delicious eating. the Pintado is a restless and very clamorous bird; it has a harsh, creaking, note, which is very grating and unpleasant; it scrapes the ground like the Hen, and rolls in the dust to free itself from insects. during the night it perches on high



places; if disturbed, it alarms every thing within hearing by its unceasing cry. in its natural state of freedom it is said to prefer marshy places, the above drawing was taken from a living bird in the possession of M<sup>r</sup> Kearney of Monkstown C<sup>o</sup>. Dublin.

### The Redbreast,

This general favourite is too well known to need Description. during the summer it is rarely to be seen. It feeds on insects and worms, his well known familiarity has secured the protection of men in all ages. when the cold grows severe and the snow covers the ground he approaches the house, taps at the window with his bill, as if to entreat an asylum, which is always cheerfully granted, and often remains untill the return of fine weather,





The Bullfinch,





## The Bullfinch,

Is common in every part of this island as well as most parts of Europe, its usual haunts, during summer, are in woods and thickets, but in Winter it approaches nearer to cultivated grounds, and feeds on seeds, winter berries &c. in the spring it frequents gardens, where it is usefully busy in destroying worms &c. the Female makes her nest in bushes, and lays five or six eggs. in a wild state its note is very simple, but when kept in a cage, it may be taught to whistle a variety of tunes, they are frequently imported into this country from Germany, where they are taught to articulate several words.



The Peewit, or Lapwing.





Is a constant inhabitant of this country; but as it subsists chiefly on worms, it is forced to change its place in quest of food, and is frequently seen in great numbers by the sea shores, where it finds an abundant supply. it is a lively active bird, almost continually in motion, it sports and frolics in the air in all directions, it runs along the ground very nimbly repeating its well known cry without intermission. the female lays four eggs, she makes no nest, but deposits them upon a little dry grass, during this period the old ones are very assiduous in their attention to their charge: on the approach



of any person to the place, they flutter round his head with cries of the greatest inquietude, which increases as he draws near to where the brood are squatted, in case of extremity, they run along the ground as if lame, in order to draw off the attention of the fowler from any further pursuit.

in the month of October the Saps are very fat, and are then said to be excellent eating: their eggs are considered as a great delicacy and are sold in the London markets at three shillings a dozen, at the latter end of July these birds assemble in large flocks which hover in the air, and after rain disperse among the ploughed fields,





*The Greater Titmouse.*

Is in common with all Titmice, widely spread over every part of the old continent, from the northern parts of Europe to the Cape of Good Hope, as well as to the farthest parts of India, China, and Japan; they are likewise found throughout the vast continent of



America, and in several of the West India Islands. The Titmouse begins to pair early in February, their nest is composed of the softest and most downy materials - they build it generally in the hole of a tree, the Female lays from eight to ten eggs, after the young have quitted the nest they return no more to it, but perch on the neighbouring trees, and incessantly call on each other, till the approach of Spring invites them to pair. Titmice are all very bold and daring, and will attack birds much larger than themselves with great intrepidity. Buffon says, that they pursue the Owl with great fury, they will attack birds smaller than themselves which they kill, and picking a hole in the skull, they eat out the brains.





The Yellow Bunting—or  
 Yellow Hammer, is common in every  
 lane and on every hedge throughout  
 the country. They feed on various  
 kinds of seeds, insects, &c. the female  
 makes an artless nest, composed  
 of hay, dried roots, and moss,  
 which she lines with hair and wool,  
 she lays four or five eggs, and



frequently has more than one brood in the season, in Italy, where small birds of almost every description are made use of for the table, they are esteemed as very good eating, and are fattened for that purpose, but with us, who are accustomed to grosser kinds of food, they are considered as too insignificant for our repasts,

### The Willow Wren,





*The Fieldfare,*





Is only a visitant in this island, making its appearance about the beginning of October, in order to avoid the rigorous winters of the North, it leaves us about the latter end of February, and retires to Prussia, Sweden, Norway, and as far as Siberia, and Kamtschatka, Buffon observes that they do not arrive in France till the beginning of December, during the winter they feed on haws and other berries; they likewise eat Worms, Snails, and Slugs. They are of a social disposition, and mostly are to be seen in vast flocks, and flying in a body through the fields in search of food.





### The Whinchat,

Is a solitary bird, frequenting heaths and moors, it builds its nest at the root of bushes, or under stones, The Female lays five eggs, it feeds on worms, flies, and insects, about the end of summer it is very fat, and at that time is said to be scarcely inferior in delicacy to the Ortolan, it has no song, but only a simple unvaried note, in the northern parts of England it disappears in winter, but its migration is only partial, as it is seen in the southern counties at that season,





### The Golden-Crested Wren.

This curious little bird delights in the largest trees, such as Oaks, Elms, tall Pines, and firs, in these it builds its nest, which is of a round form, having an aperture on one side, the female lays six or seven eggs, scarcely larger than peas, it is supposed to be the least of all the European birds being in length



not quite three inches and a half long,  
 their food consists chiefly of the small-  
 est insects, which they find in the  
 crevices of the bark of trees, or catch  
 nimbly on the wing, the Golden Crested  
 Wren is diffused throughout Europe,  
 it has also been met with in various  
 parts of Asia and America, and  
 seems to bear every change of tempera-  
 =ture, it stays with us the whole  
 year, but M<sup>r</sup> Pennant observes, that  
 it crosses annually from the Orkneys  
 to the Shetland Isles, where it breeds,  
 and returns before winter—a long  
 flight (of sixty miles) for so small a  
 bird, its song is said to be very melo-  
 =dious, but weaker than that of the  
 common Wren,





The Cuckoo,



413

# The Cuckoo.

Visits us early in the Spring - its well known cry is generally heard about the middle of April, and ceases the latter end of June, its stay is short, the old Cuckoo's being said to quit this country early in July. Cuckoos never pair; they build no nest; and what is more extraordinary, the Female deposits her solitary egg in that of another bird, by whom it is hatched, the nest she chooses for this purpose is generally selected from the following, viz. the Hedge Sparrow, the Water Wagtail, the Tit Lark, the Yellow Hammer, the Green Linnet, or the Whinchat, of these it has been observed that she shows a much greater partiality to the Hedge Sparrow than to



any of the rest. it would carry us beyond the limits of our work to give a detail of all the observations made on this singular bird, whose history has for ages been enveloped in fable, and mixed with unaccountable stories founded in ignorance and superstition. at what period the young Luchuos leave this country is not precisely known; Mr Jenner supposes they go off in succession and leave us as soon as they are capable of taking care of themselves, that some of them remain here in a torpid state, we have no reason to doubt, but this cannot be the case with the greater part of those which leave this country, and retire to milder climates to avoid the rigours of winter. Buffon mentions several instances of young Luchuos having



4/5

been kept in cages, which, probably  
for want of proper nutriment, did  
not survive the winter, Bewick men-  
tions one which was preserved through  
the winter by being fed with worms,  
insects, soaked bread, and small pieces  
of flesh. the plumage of the Luchoo  
varies greatly at different periods of  
its life. in young Luchos the bill, legs  
and tail are nearly the same as in  
the old ones; but the throat, neck,  
breast, and belly are elegantly  
barred with a dark brown on a light  
ground, whilst in the old ones these  
bars cease at the breast, the neck,  
and throat being dark like the Lach.  
hence it appears that the specimen  
from which the above drawing was taken



was a young bird.



# The Nuthatch.

Like the Woodpecker, frequents woods, and is a shy and solitary bird, the Female lays her eggs in holes of trees, frequently in those that have been deserted by the Woodpecker, she is easily driven from her nest, but on being disturbed hisses like a snake, the Nuthatch feeds on



Caterpillars, Beetles, and various kinds of insects; it likewise eats nuts, and is very expert in cracking them so as to come at the contents; having placed a nut fast in a chink, it takes its stand a little above, and, striking it with all its force, breaks the shell and catches up the kernel. Like the Woodpecker, it moves up and down the trunks of trees with great facility in search of food. it does not migrate, but in the winter approaches nearer inhabited places, and is sometimes seen in orchards and gardens, the young ones are esteemed very good eating.





The Herring.



## The Herring

Is found in the greatest abundance in the highest northern latitudes. in those inaccessible seas, that are covered with ice for a great part of the year, the Herring finds a quiet and sure retreat from all its numerous enemies: thither neither man nor their still more destructive enemy, the Finfish, or the Cachalot, dares to pursue them, the quantity of insect food which those seas supply, is very great; whence in that remote situation, they live at ease, and multiply beyond expression. From this most desirable retreat, Anderson supposes they would never depart, but that their numbers render it necessary for them to migrate; and as Bees from a hive, they are compelled to seek for other retreats, for this reason, the great colony is seen to set out from the icy sea about the middle of winter; composed of such numbers, that if all the men in the world were to be loaded with Herrings,



they would not carry the thousandth part away, but they no sooner leave their retreats, but millions of enemies appear to them their squadrons the Finfish and the Cachalot swallow barrels at a yawn; the Porpoises, the Grampus, the Shark, and the numerous tribe of dogfish, find them an easy prey, but still more, the unnumbered flocks of sea fowl that chiefly inhabit near the Pole, watch the outset of their dangerous migration, and spread extensive ruin.

in this exigence, the defenceless emigrants find no other safety but by crowding closer together, and leaving to the outermost bands the danger of being first devoured. then they are seen to separate into shoals, one body of which moves to the west, and pours down along the coasts of America, as far south as Carolina, but seldom farther. in Chesapeake Bay, the annual inundation of these fish is so great, that they cover the shores in such quantities as to become



a nuisance, those that hold more to the East, and come down towards Europe, endeavour to save themselves from their merciless pursuers, by approaching the first shore they can find; and that which first offers in their descent, is the coast of Iceland, in the beginning of march. upon their arrival on that coast their phalanx, which has already suffered considerable diminutions, is nevertheless of amazing extent, depth, and closeness, covering an extent of shore as large as the Island itself. that body which comes upon our coasts, begins to appear off the Shetland Isles in April. these are the forerunners of the grand shoal which descends in June; while its arrival is easily announced, by the number of its greedy attendants, the Gannet, the Gull, the Shark, and the Porpoises. when the main body is arrived, its breadth and depth is



such as to alter the very appearance of the ocean. it is divided into distinct columns, of five or six miles in length, and three or four broad, while the water before them curls up, as if forced out of its bed. sometimes they sink for the space of ten or fifteen minutes, then rise again to the surface; and in bright weather, reflect a variety of splendid colours, like a field bespangled with purple, Gold and Azure. the fishermen are ready prepared to give them a proper reception; and by nets made for the occasion, they take sometimes above two thousand barrels at a single draught.!! the power of encreasing in these animals, exceeds our idea, as it would in a very short time, outstrip all calculation: and a single Herring, if suffered to multiply unmolested for twenty years, would shew a progeny greater in bulk than ten such Globes as that we live upon,





*The Wryneck.*

This curious bird, though similar in many respects to the Woodpecker, seems to constitute a genus of itself: it is found in various parts of Europe, and generally appears with us a few days before the Luchoo. it makes an artless nest, of dry grass upon dusty rotten wood, in holes of trees, the entrance of which is so small as scarcely to admit the hand, on which account its eggs are come at



with difficulty: according to Buffon, they are pure white, and from eight to ten in number. its food consists chiefly of ants and other insects. the Wrynnech is a solitary bird, and leads a sequestered life, it holds itself very erect on the branch of the tree where it sits; its body is almost bent backwards, whilst it writhes its head and neck by a slow and almost involuntary motion, not unlike the waving wreaths of a reptile.

The Redstart,





## The Redstart

Is migratory; it appears about the middle of April, and departs the latter end of September; it frequents old walls and ruinous edifices, where it makes its nest, though a wild and timorous bird, it is frequently found in the midst of cities, it likewise builds in forests, in holes of trees, or in high and dangerous precipices, the female lays four or five eggs, these birds feed on flies, spiders, the eggs of ants, small berries, soft fruits, and such like.



The Pied Wagtail



Is a very common bird with us, and may be seen every where, running on the ground, and frequently leaping after flies and other insects, on which it feeds. its usual haunts are the shallow margins of waters, into which it will sometimes wade a little in search of its food. it makes its nest on the ground, the female lays five eggs. the parent birds are very attentive to their young, and when in danger will defend them with great courage.

the Wagtail is said by some Authors to migrate into other climates about the end of October; with us it is known to change its quarters as the winter approaches, from North to South. its note is small and insignificant but frequently repeated, especially while on the wing.



The Red-legged Tropicbird — Cornish Chough.





Builds on high cliffs by the sea side, and chiefly frequents the coasts of Devonshire and Cornwall, and likewise many parts of Wales; a few are found in the Dover Cliffs, and some in Scotland. the female lays four or five eggs: it is a voracious, bold, and greedy bird, and feeds on insects and berries, its manners are like those of a Jackdaw: it is attracted by glittering objects, Buffon says that it has been known to pull from the fire lighted pieces of wood, to the no small danger of the house.

The White-rump.

Wheatear.





Visits us about the middle of March, it frequents new tilled grounds, and never fails to follow the plough in search of insects, and worms, its principal food. great numbers of these birds are sent to the London Markets, where they are much esteemed, The White Rump breeds under shelter of a tuft or clod, and sometimes in old Rabbit holes. the female lays five or six eggs. They leave us in August and September, and about that time are seen in great numbers by the sea shore, where probably they subsist some little time before they depart. they are extended over a large portion of the Globe, even as far as the southern parts of Asia. in some parts of England great numbers are taken in snares made of Horse hair, placed beneath a turf: near 2000 dozen are said to be taken annually in that way, in one district only, which are generally sold at sixpence a dozen.





The Canary Finch, copied from a  
Living bird.

In a wild state these birds are found chiefly in the Canary Islands, from whence they have been brought to this country, and almost every part of Europe. They are kept in a state of captivity, and partake of all the varieties attendant on that state. Buffon enumerates twenty nine varieties.





The Goldfinch, copied from  
a living bird,

Beauty of plumage, says the lively Count  
De Buffon, melody of song, sagacity,  
and docility of disposition, seem all  
united in this charming little bird.  
They begin to sing early in the Spring,  
and continue till the time of breeding  
is over; when kept in a cage, they will  
sing the greatest part of the year.  
The female lays five eggs. They feed  
on Seeds &c.



This bird is very well known, being common in every part of Europe, it builds its nest in low bushes, and lays four or five eggs, the song of the Linnet is beautiful and sweetly varied, its manners are gentle, and its disposition docile; Linnets are frequently found in flocks; during winter, they feed on various sorts of seeds, and are said to be particularly fond of linseed, from whence they derive their name, when confined with other birds, it easily adopts their song. The Gray Linnet, copied from a living bird.





*The Swann,*







Those who have walked in an evening by the sedgy sides of unfrequented rivers, must remember a variety of notes from different water fowl: the loud scream of the Wild Goose, the croaking of the Mallard, the whining of the Lapwing, and the tremulous neighing of the Jack Snipe. But of all those sounds, there is none so dismally hollow as the booming of the Bittern. It is impossible for words to give those who have not heard this evening call an adequate idea of its solemnity. It is like the interrupted bellowing of a Bull, but hollower and louder, and is heard at a mile's distance, as if issuing from some formidable being that resided at the bottom of the waters. The Bittern is a shy solitary bird; it is never seen on the wing in the day time, but sits, commonly with the head erect, hid among



the weeds and rushes in the marshes, where it always takes up its abode, and from whence it will not stir, unless it is disturbed by the sportsman, when it changes its haunts, it removes in the dusk of the evening, and then rising in a spiral direction, soars to a vast height. it flies in the same heavy manner as the Heron. the Bittern, when attacked by the Buzzard, or other birds of prey, defends itself with great courage, and generally beats off such assailants; neither does it betray any symptoms of fear, when wounded by the Sportsman, but eyes him with a keen undaunted look, and when driven to extremity, will attack him with the utmost vigour, wounding his legs, or aiming at his eyes with its sharp and



piercing bill. it was formerly held in much estimation at the tables of the Great, and is again recovering its credit as a fashionable dish.

This bird lives upon the same water animals as the Heron, for which it patiently watches, unmoved, for hours together. it lays its nest in a sedgy margin, or amidst a tuft of rushes, and composes its simple habitation of sedges, the leaves of water plants, and dry rushes. it lays generally seven or eight eggs of an ash green colour, and in three days leads its little ones to their food. the windpipe of the Bittern is fitted to produce the sound for which it is remarkable, the lower part is supplied with a loose membrane that can be filled with a large body of air, and exploded at pleasure.





The Great Crested Grebe.



Is the largest of the Grebes, and is common in the fens and lakes in various parts of England, where they breed and rear their young. The female conceals her nest among the flags and reeds which grow in the water, upon which it is said to float, and that she hatches her eggs amidst the moisture which oozes through it. It is made of dried fibres &c.

These birds are met with in almost every lake in the northern parts of Europe, as far as Iceland, and southward to the Mediterranean; they are also found in various parts of America. Pennant asserts that when the nest of this bird, happens to be blown from among the reeds, it floats about upon the surface of the open water,





of Italy, is suffered to crawl about the  
chambers, and often gets into the beds wh-  
ere people lie. It will, though innocent  
bite when exasperated, they are great des-  
troyers of mice, and this may be the  
reason, why they are protected.





*The Blue Snake*





The Spotted Snake.





The  
Coluber Doliatus.

The  
Blue-Headed  
Snake.





The  
Bronze Beetle.



The Hoary Beetle.



The  
Bronze Buprestus



The Buprestus,



The Herculean Beetle,  
of America,







*Scarabaeus Actaeon, or Brazilian  
Bullcomber.*



*The Stag Beetle.*



*The  
Interrupted  
Stag Beetle.*



*The Rough Indian Beetle.*





*The Spotted Locust.*



*an Indian Grasshopper,*



*an other Indian Grasshopper*





The Capricorn Beetle



The Yellow Lamia.



The Broad Water Beetle.



The Oculator Lamia.



The Menelaus Butterfly.



The Orange tipped Butterfly





The Scorpion.



The Armenian Bird Spider.



The Black tipped yellow Butterfly.



The Glossy Green Carabus.



The Cerulean Savage.



The Euphygiger Grasshopper





The *Blatta Gigantea*  
or American Cockroach.



yellow Butterfly.



The *Idomenus* Butterfly,





Burnet Moth,  
a variety, of the



White Banded Tiger  
Moth



The Death's Head  
Moth

The Scarlet Admiral  
Butterfly



The Black legged,  
Bug





*The Great Atlas Moth, of Surinam.*



*The Lantern Fly, of Peru.*



*The Great Unicorn Moth.*





The Bronze'd Winged Dragon Fly.

Having thus completed my intention  
and having given to the reader draw-  
ings of all the Quadrupeds, Birds,  
Fishes, Serpents, and Insects, which I  
could procure to copy, I think I can not  
devote the remainder of this work, to  
a better purpose, than giving a short  
survey over all the animated World,



of these undoubtedly Quadrupeds, claim  
 the preference, and next to man, exer-  
 -cise their superiority over every thing  
 that is within their reach. in con-  
 -templating this race of animals  
 so numerous in themselves, and so  
 innumerable if we join to them  
 those having wings like the Bat,  
 and those that are amphibious  
 none but the most insensible mind, but  
 can wonder at the formation and  
 the various properties, and dispositions  
 of the brute Creation. Was the  
 Lion or the Tiger to be endowed with  
 the wings of the Eagle, was the  
 Elephant to partake of the savage  
 cruelty of the Tiger, or was the  
 swiftness of the greyhound to be  
 gifted to the Crocodile, how could  
 the human race remain, how could  
 it exist surrounded with such ene-  
 -mies.



but if we examine this subject more  
 minutely, we shall find, that the  
 wisdom and goodness of Providence  
 has endowed each with some defect  
 to stop its dread career, and its des-  
 truction, from being universal, but on  
 the other hand if we consider the vast  
 number of these animals, who so large-  
 ly contribute to the happiness, nay  
 to the very existence of man, and  
 compare their number, with that of  
 the destructive, we shall find that  
 they do not bear comparison, few ani-  
 mals\* venture to attack man, there  
 are not above eight kinds, that have  
 either sufficient courage or the power,  
 and of these, few will attack him  
 except pressed by excessive hunger.  
 and for these, the Horse, the Cow, the  
 Sheep, the dog, and the numerous tribe

\* Quadrupeds.



of Animals, who afford him such an endless source of pleasure and utility, make the most ample amends, we must surely then allow that this race of animals, notwithstanding the number of its monsters, we must place it in a rank above all other part of animated nature.

Notwithstanding this, we must allow that in no part of the Animal-Creation are the wisdom, the goodness, and the bounty of Providence displayed in a more lively manner than in the structure, formation, and various endowments of the feathered Tribes, instead of the large head, and formidable jaws, the deep capacious chest, the brawny shoulders, and sinewy legs of the Quadrupeds, we observe



the pointed beak, the long and pliant neck, the gentle-swelling shoulder, the expansive wings, the tapering tail, the light and bony feet; which are all wisely calculated to assist and accelerate their motion through the yielding air. Birds may be distinguished like Quadrupeds, into two kinds or classes Granivorous and Carnivorous; Granivorous birds partake much of the nature and disposition of herbivorous Quadrupeds, they are both distinguished by the gentleness of their tempers and manners, contented with the seeds of plants, with fruits, Insects, and Worms their chief attention is directed to procuring food, hatching and rearing their offspring, and avoiding the snares of man, who, ever attentive and watchful to his interest, has



not failed to avail himself of these dispositions, of these the Hen, the Goose, the Turkey, and the Duck, form an inexhaustible store of rich, wholesome, and nutritious food. The analogy between the structure of Carnivorous Birds, and Carnivorous Quadrupeds is obvious; both of them are provided with Weapons which indicate destruction and rapine, their manners are fierce and unsocial, when not on the wing, they retire to the tops of sequestered rocks, or the depths of extensive forests, where they conceal themselves in sullen and gloomy solitude. without the means of conveying themselves with great swiftness from one place to another, Birds could not easily subsist, the food which Nature has so bountifully



provided for them is so irregularly distributed, that they are obliged to take long journeys to distant parts in order to gain the necessary supplies, such birds as migrate to a great distance are alone denominated birds of Passage. at particular times of the year most birds remove from one country to another, or from the more inland districts towards the shore. the times of these migrations are observed with the most astonishing order and punctuality. but the secrecy of their departure and the suddenness of their re-appearance has involved the subject of migration in general, in great difficulty. Like amphibious Animals a great variety of birds live chiefly in the water, and feed on fishes, Insects and other aquatic productions. there are two divisions of this numerous



family — the Waders and the Swimmers: these are generally found far removed from the cultivated world. the northern extremities of the earth seem as if they were set apart for the nations of the feathered race, as their peculiar heritage which they have held coeval with Creation. there, amidst lakes and endless swamps, where the human foot never trod, and where, excepting their own cries, nothing is heard but the winds, they find an asylum where they can rear their young in safety, unmolested, and surrounded by a profusion of plenty. as soon as the sun begins, in shortened peeps, to quit his horizontal course, the falling snows, and the hollow blasts foretell the change, and are the signals for their departure. — then it is, that



the widely spreading winged host, directed by instinctive knowledge, leave their native wilds, the Arctic regions, that prolific source, whence these multiplied migrators, in flocks innumerable, and in directions like radii from the center of a circle, are poured forth to replenish the more southern quarters of the Globe. Here the whole host of Sea-Soul find in the waters an inexhaustible supply of food: for the great movement, the immense southward migration of fishes is then begun. and are encountered and preyed upon by the whole hosts of Sea-Soul, which continually watch all their motions. indeed it is a melancholy reflection, that, from man, downwards, to the smallest living creature, all are found to prey



upon and devour each other. The Philosophic mind, however, sees this waste of animal life again and again repaired by fresh stores, ever ready to supply the void, and to this dispensation of an all wise Providence, so interesting to humanity, bows in awful silence.

The Tribe of Fishes evidently hold the next rank, in the scale of nature, their chief instrument of motion are, the Fins, which in some fish are more numerous than in others. The senses of fishes are remarkably imperfect, and, indeed that of sight is almost the only one which, in general, they may be truly said to possess. but this is, in some degree, compensated by their astonishing longevity, several species being known to live for



more than an hundred years, their longevity is still exceeded by their singular fecundity; for a single Cod, for instance, produces at a Birth as many young ones, as there are inhabitants in all Great Britain, above nine millions. the Flounder produces at once above a million, and the Macharel five hundred thousand. the young sparrow are the prey of all the inhabitants of the water, even of their own parents, and scarcely one in a thousand escapes the numerous perils of its youth. such is the general picture of these heedless and hungry creatures; but there are some in this class, living in the waters, that are possessed of finer organs and higher sensations; that have all the tendernefs of birds, or Quadrupeds for their young.



that nurse them with constant care, and protect them from every injury. Of this class are the Cetaceous Tribe, or the fishes of the whale kind, there are others, though not capable of nursing their young, yet that bring them alive into the world, and defend them with courage and activity. these are the Cartilaginous kinds, or those which have gristles instead of bones. But the fierce unmindful Tribe we have been describing, that leave their spawn without any protection, are called the Spinous or Bony kinds. Of Cetaceous Fishes, this tribe is composed of the Whale and its varieties, of the Cachalot, the Dolphin, the Grampus, and the Porpoise. Of Cartilaginous Fishes, the size of all Fishes increas-  
=es



with age, but from the pliancy of the bones in this tribe, they seem to have no bounds placed to their dimensions: and it is supposed that they grow larger every day till they die. The third general division of fishes is into that of the Spinous or bony kind and these having been extremely numerous, have been divided by Mr. Gouan into two grand divisions, and these again into sub-divisions. *vid.*

Prickly Finned Fishes. Prickly Finned Apodal Fishes. Prickly Finned Jugular Fishes. Prickly Finned Thoracic Fishes. Prickly finned Abdominal Fishes. Soft Finned Fishes. Soft Finned Apodal Fishes. Soft finned Jugular fishes. Soft finned Thoracic Fishes. Soft Finned Abdominal Fishes. there are two classes of Animals, inhabiting the water, which commonly



receive the name of fishes, entirely different from those we have been describing, these are divided by naturalists into Crustaceous and Testaceous Animals. Crustaceous Fish, such as the Crab and Lobster, have a shell not quite of a stony hardness, but rather resembling a firm crust, and in some measure capable of yielding. Testaceous Fishes, such as the Oyster or Cochle, are furnished with a shell of a stony hardness; very brittle and incapable of yielding. of the Crustaceous kinds are the Lobster the Crab, and the Tortoise; of the Testaceous, that numerous tribe of Oysters, Muscles, Cochles, and Sea Snails, which offer with infinite variety. We now come to a different race of animals viz of Serpents,



In none of the Countries of Europe is the  
Serpent Tribe sufficiently numerous  
to be truly terrible. The various ma-  
-lignity also that has been ascribed  
to European Serpents of old, is now  
utterly unknown; there are not abo-  
-ve three or four kinds that are dan-  
-gerous, and their poison operates in  
all in the same manner. a burning  
pain in the part, easily removable  
by timely applications, is the worst  
effect that we experience from the  
bite of the most venomous serpents  
of Europe. though, however, Europe be  
happily delivered from these Preptiles,  
in the warm countries that lie with-  
-in the Tropic, as well as the cold regi-  
-ons of the north, where the inhabitants  
are few, the Serpents propagate in equal



proportion. all along the swampy banks of the river Niger or Oronoko, where the sun is hot, the forests thick, and the men but few, the Serpents cling among the branches of the trees, in infinite numbers, and carry on an unceasing war against all other animals in their vicinity. Travellers have assured us that they have often seen large Snakes twining round the trunk of a tall tree, encompassing it like a wreath, and thus rising and descending at pleasure. in these countries, therefore, the Serpent is too formidable to become an object of curiosity, for it excites much more violent sensations. We are not, therefore, to reject as wholly fabulous, the accounts left us by the Antients of



the terrible devastations committed by a single serpent. it is probable, in early times, when the arts were little known, and Mankind were but thinly scattered over the earth, that Serpents, continuing undisturbed possessors of the forest, grew to an amazing magnitude; and every other tribe of animals fell before them. we have many histories of antiquity, presenting us such a picture; and exhibiting a whole nation sinking under the ravages of a single Serpent. We are told that while Regulus led his army along the banks of the river Bagrada, in Africa, an enormous Serpent disputed his passage over, we are assured by Pliny, who says



that he himself saw the skin,  
that it was an hundred and two-  
-enty feet long, and that it had  
destroyed many of the army.

at last, however, the battering  
engines were brought out against  
it; and these assailing it at a  
distance, it was soon destroyed.

This tribe of Animals, like that of  
Fishes, seems to have no bounds put  
to their growth: their bones are in  
a great measure cartilaginous, and  
they are consequently capable of  
great extension; the older, therefore,  
a Serpent becomes, the larger it  
grows; and as they seem to live to  
a great age, they arrive at an enor-  
-mous size. Leguat assures us, that  
he saw a serpent in Java, that  
was fifty feet long; and Carli



mentions their growing to above forty feet. Mr. Wentworth, who had large concerns in the Brebices in America says that in that country, they grow to an enormous length. in the East-Indies they grow also to an enormous size particularly in the Island of Java, where, we are assured, that one of them will destroy and devour a Buffalo. in a letter, printed in the German Ephemerides, we have an account of a combat between an enormous Serpent, and a Buffalo, by a person, who assures us that he was himself a spectator. the Serpent had for some time been waiting near the brink of a pool, in expectation of its prey; when a Buffalo was the first that



offered. having darted upon the affrighted animal, it instantly began to wrap it round with its voluminous twistings; and at every twist the bones of the Buffalo were heard to crack as loud as a cannon.

it was in vain that the poor animal struggled and bellowed; its enormous enemy entrained it too closely to get free; till at length, all its bones being mashed to pieces, like those of a malefactor on the wheel, and the whole body reduced to one uniform mass, the Serpent then having stretched the carcase, took in at once a morsel that was three times its own thickness. we are assured by Travellers, that these animals are often found with the body of a Stag in their



gullet, while the horns, which they are unable to swallow, keep sticking out at their mouth.

But it is happy for mankind, that the rapacity of these frightful creatures is often their punishment, for when they have gorged themselves in this manner they then become torpid and may be destroyed with safety. But though these animals are above all others the most voracious, yet no animals upon earth bear abstinence so long as they. a single meal with many of the snake kind, seems to be the adventure of a season. Vipers are often kept in boxes for six or eight months, without any food whatever. Thus the Serpent tribe, unite in themselves, two very opposite qualities; Wonderful abstinence, and yet



incredible rapacity. some Serpents have a most horrible factor attending them, which is alone capable of intimidating the Brave.

from these noxious qualities in the Serpent Tribe, it is no wonder that not only man, but beasts and birds, carry on unceasing war against them.

Lastly we must describe the Insect Tribe, which undoubtedly holds the last rank in Animated Nature.

Of all living beings, man offers the most wonderful variety in his internal conformation; Quadrupeds come next; and other animals follow in proportion to their powers or their excellencies. Insects seem above all others the most imperfectly formed. but one thing argues an evident imperfection; which is



that many of them can live a long time, though deprived of those organs which are necessary to life in the higher ranks of nature, many of them are furnished with lungs and a heart like nobler animals; yet the Caterpillar continues to live, though its heart and lungs, which is often the case, are entirely eaten away. but it is not from their conformation alone, that insects are inferior to other animals, but from their instincts also. it is true that the Ant and the Bee present us with very striking instances of assiduity, but, how far are theirs beneath the marks of sagacity exhibited in the Brute Creation, if insects be considered as bearing a relation to man, and as assisting



him in the pleasures or necessities of life, they will even in this respect, sink in the comparison with the larger tribes of nature. it is true, that the Bee, the Silkworm, the Cochineal Fly, and the Antharides, render him signal services; but how many others of this class, are either noxious, or totally unserviceable to him. even in a country like ours, where all the noxious animals have been reduced by repeated assiduity, the insect tribes still maintain their ground, and are but too often unwelcome intruders upon the fruits of human industry. but, in more



uncultivated regions, their annoyance and devastations are terrible, what an uncomfortable life must the natives lead in Lapland, and some parts of America, where if a candle be lighted, the insects swarm in such abundance, as instantly to extinguish it with their numbers; where the inhabitants are obliged to smear their bodies and faces with tar, or some other composition, to protect them from the puncture of their minute enemies; where, though millions are destroyed, furnished millions are still seen to succeed, and to make the torture endless!!!. their amazing number is also an argument of their imperfection, it is a rule that



obtains through all nature,  
that the nobler animals are  
slowly produced, and that  
nature acts with a kind of  
dignified economy; but  
the meaner births are lavished  
with profusion; and thousands  
are here brought forth merely  
to supply the necessities of the  
more favourite objects of creation.  
all other animals are capable  
of some degree of education; the  
Dog may be taught to fetch and  
carry. the bird to whistle a tune.  
and the Serpent to dance;  
but the insect has but one in-  
variable method of operating;



no arts can turn it from its exist-  
 =ence; and indeed its life is too short  
 for instruction, as a single season  
 often terminates its existence.

for these reasons, the Insect tribe are  
 deservedly placed in the lowest  
 rank of animated nature.

The Smallness of an animal  
 does not constitute an Insect; for  
 then many of the Lizard kind,  
 which are not above two inches  
 long, would come under this deno-  
 =mination, in the same manner,  
 smallness, with a slow, creeping  
 motion does not constitute an in-  
 =sect, for though Snails might be  
 called insects, with some propri-  
 =ety, the whole tribe of Sea Shell  
 Fish, would then have equal



pretensions, and a very troublesome innovation would be brought into our language, which is already formed. excluding such animals, therefore, from the insect tribe, we may define insects to be little animals without red blood, bones or cartilages, furnished with a trunk, or else a mouth, opening lengthwise, with eyes which they are incapable of covering, and with lungs which have their openings on the sides,

in a cursory inspection of the insect Tribe, the first animals that offer themselves are those that never have wings, but creep about



till they die, and these may be considered as constituting the first class of insects. all these, the Flea and the Wood-louse only excepted, are produced from an egg. the strength of some of this class is almost incredible. a Flea will draw a chain a hundred times heavier than itself, and will eat ten times its own size of provision in a single day.

The second order of insects consists of such as have wings; but which, when produced from the egg, have those wings cased up in such a manner as not to appear.

this casing up of the wing, however, does not prevent the animal's running, and moving with its natural



celerity; but when the case bursts, and the wings have a power of expanding, all its motions become more extensive, and the Animal arrives at full perfection.

The Third order of insects is of the Moth and Butterfly kind. these insects also are produced in a manner peculiar to themselves. they are first hatched from an egg, whence proceeds a Caterpillar, that eats, and often casts its skin; the Caterpillar having divested itself for the last time, assumes a new covering, which is called a Chrysalis, in which it continues hidden, till it comes forth a perfect Moth and Butterfly.

The fourth order is of those winged



insects which come from a worm, instead of a Caterpillar, and yet go through changes similar to those which Moths and Butterflies are seen to undergo. the wings of all these differ from those of the Moth and Butterfly kind by not having the mealy matter which is ever found on the wings of the former. in this class we may place the numerous tribe of Gnats, Beetles, Bees and Flies.

To these we add, as a fifth order, a numerous tribe lately discovered, to which Naturalists have given the name of *Loophyles*, these instead of being generated, may be propagated by dissection. some of these, though cut into an hundred parts, still retain life in each, and are



endued with such a vivacious principle, that every part will, in a short time, become a perfect animal. they seem a set of creatures placed between Animals and vegetables, and make the shade that connects Unanimated and insensible nature. to this class belong the Polypus, the earth-worm, all the varieties of the Sea Nettle; and to it may probably be referred those curious creatures which produce the Coral, the Sponge, and other singular and similar Marine productions.

Upon casting a slight view over the whole insect tribe, just when they are supposed to rouse from



their state of annual torpidity, when they begin to feel the genuine influence of Spring, and again exhibit new life in every part of nature, their numbers and their varieties seem to exceed all powers of calculation; and they are indeed too great for description. It is impossible to finish this short review of nature without observing the wonderful harmony and connection that subsists between all the different branches without observing how happily one part supports another, and how every thing contributes to the general good. How infinitely great must be that Eternal Mind who framed all with such amazing



skill — who sees with a single  
glance the operation and me-  
chanism of the whole, from  
the minute anatomy of the  
Ant, to those innumerable  
worlds, those vast and splendid  
Orbs that gild the unbounded  
expanse of the Universe!



The Lobster





## Of the Lobster

However different in figure the Lobster and the Crab may seem, their manners and conformation are nearly the same. With all the voracious appetites of fishes, they are condemned to lead an insect life at the bottom of the water; and though pressed with continual hunger, they are often obliged to wait till accident brings them their prey. Though without any warmth in their bodies, or even without red blood circulating through their veins, they are animals wonderfully voracious. Whatever they seize upon that has life, is sure to perish, though ever so well defended: they even devour



each other: and to encrease our surprise still more, they may in some measure be said to eat themselves, as they change their shell, their stomach even, every year. and their old stomach is generally the first morsel that serves to glut the new. When the young Lobsters leave their parent, they immediately seek for refuge in the smallest clefts of rocks where the entrance is but small, and the opening can be easily defended, there, without seeming to take any food, they grow larger in a few weeks time, from the meer accidental substances which the water washes to their retreats, by this



time also they acquire an hard, firm shell, which furnishes them with both offensive and defensive armour.

they then begin to issue from their fortresses, and boldly creep along the bottom, in hopes of meeting with more diminutive plunder. the spawn of fish, the smaller animals of their own kind, but chiefly the worms that creep at the bottom of the sea, supply them with plenty. but this life of abundance and security is soon to have a most dangerous interruption; for the body of the Lobster still continuing to increase, while its shell remains unalterably the same, the animal becomes too large for its habitation,



and imprisoned within the crust that has naturally gathered round it, there comes on a necessity of getting free. just before casting its shell, it throws itself upon its back, strikes its claws against each other, and every limb seems to tremble; its feelers are agitated, and the whole body is in violent motion, it then swells itself in an unusual manner, and at last the shell is seen beginning to divide at its junctures. it also seems turned inside out; and its stomach comes away with its shell. after this, by the same operation, it disengages itself of the claws, which burst at the joints; the animal with a tremulous motion, casting them off as a man would kick off



a boot that was too big for him.  
thus, in a short time this wonderful  
creature finds itself at liberty:  
but in so weak and enfeebled a  
state, that it continues for several  
hours motionless. indeed, so violent  
and painful is the operation, that  
many of them die under it; and  
those which survive, are in such a  
weakly state for some time, that  
they neither take food nor venture  
from their retreats. immediately  
after this change they have not  
only the softness but the limidity  
of a worm. every animal of the  
deep is then a powerful enemy  
which they can neither escape nor  
oppose, and this is the time when



the Log fish, the Cod, and the Ray devour them, by hundreds. But this state of defenceless imbecility continues for a very short time: the animal in less than two days, is seen to have the skin that covered its body grown almost as hard as before; its appetite is seen to encrease; and strange to behold! the first object that tempts its gluttony, is its own stomach, which it so lately was disengaged from: this it devours with great eagerness; and some time after eats even its former shell. in about forty eight hours, in proportion to the animals health and strength the new shell is perfectly formed, and as hard as that which was but



just thrown aside.

When the lobster is completely equipped in its new shell, it then appears how much it has grown in the space of a very few days; the dimensions of the old shell being compared with those of the new, it will be found that that the creature is increased above a third in its size, and it seems wonderful how the deserted shell was able to contain so great an animal as entirely fills up the new.

The creature thus furnished, not only with a complete covering, but also a greater share of strength and courage, ventures more boldly among the animals



at bottom; and not a week passes that in its combats it does not suffer some mutilation. a joint, or even a whole claw, is sometimes snapped off in these encounters. at certain seasons of the year these animals never meet each other without an engagement. in these, to come off with the loss of a leg, or even a claw, is considered as no great calamity; the victor carries off the spoil to feast upon at his leisure, while the other retires from the defeat to wait for a thorough repair. this repair is not long in procuring. from the place where the joint of the claw was cut away, is seen in a most surprising manner



to Surgeon out the beginning of a new claw. this if observed, at first, is small and tender, but grows, in the space of three weeks, to be almost as large and as powerful as the old one. I say almost as large, for it never arrives at the full size; and this is the reason we generally find the claws of lobsters of unequal magnitude. Of this extraordinary yet well known animal there are many varieties, with some differences in the claws, but little in the habits or conformation. it is found above three feet long; and if we may admit the Shrimp and the Prawn into the class, though unfurnished



with claws, it is seen not above an inch. these all live in the water, and can bear its absence but for a few hours. the shell is black when taken out of the water, but turns red by boiling. the most common way of taking the lobster is in a basket or pot, as the fishermen call it, made of wicker work in which they put the bait, and then throw it to the bottom of the sea, in six or ten fathom water. the lobsters creep into this for the sake of the bait, but are not able to get out again. the river Cray fish differs little from the lobster, but that the one will live only in fresh water, and the other will thrive only in the sea.



*He**Place.*





*The C. Macdonald*



<sup>Appendix</sup>  
Of the Pelican

This singular bird, the drawing of which we have given at page 22, differs from all others in the bill, and the great pouch underneath, which the bird has a power of wrin<sup>g</sup>ling up into the hollow of the under chup; but by opening the bill, and putting one's hand down in to the bag, it may be distended at pleasure. Tertre affirms, that this pouch will hold as many fish as will serve sixty hungry men at a meal. such is the formation of this extraordinary bird, which is a native of Africa and America. it was once also known in Europe particularly in Prussia; but it



seems to have deserted our coasts. Pelicans are torpid and inactive to the last degree, so that nothing can exceed their indolence but their gluttony. when they have raised themselves above thirty or forty feet above the surface of the sea, they turn their head, with one eye downwards, and continue to fly in that posture. as soon as they perceive a fish sufficiently near the surface, they dart down upon it with the swiftness of an arrow, seize it with unerring certainty, and store it up in their pouch. they then rise again, though not without great labour, and continue hovering and fishing, with their



head on one side as before. The Female makes no nest, but drops her eggs on the bare ground to the number of five or six, and there continues to hatch them. the flesh is not fit to eat. with all the seeming indolence of this bird, it is not incapable of instruction in a domestic state.

Father Raymond assures us, that he has seen one so tame and well educated among the native Americans, that it would go off in the morning, and return before night to its master, with its great pouch distended with plunder, a part of which the savages would make it disgorge, and a part they would permit it to reserve for itself. Gesner tells us, that the emperor Maximilian had a tame Pelican which lived for above eighty years.



The common Alpine goat, from a  
living animal, exhibited in  
London.





The Gazelles or Antelopes,  
are a numerous and beautiful race of  
Animals, inhabiting the hottest  
parts of the Globe. They are classed  
by systematic writers with the Goat  
kind, and like them have hollow  
horns, which they never cast; in other  
respects, they greatly resemble the Deer,  
especially in the elegance of their  
form, and the swiftness of their  
motions. They are of a restless and timid  
disposition, remarkably agile, and most  
of their soundings so light and  
elastic, as to strike the spectators  
with astonishment, its swiftness  
is so great, that the Greyhound,  
the fleetest of Dogs, is unequal to  
the course, and the Sportsman is



often obliged to call in the aid of the Falcon, which being trained to the work, seizes on the animal, and impedes its motion, so as to enable the Dogs to overtake it.

Some species of the Antelopes form herds of two or three thousand, while others keep in small troops of five or six, they for the most part live in hilly countries, though some inhabit plains. they often browse like the Goat, and feed on the tender shoots of young trees, which give the carcase an excellent flavour.

there are many varieties of this animal, some of them but little known or described, the Common Antelope abounds in Barbary, and in all the northern parts of Africa.





The Guanaco, captured from a living specimen  
and exhibited in Dublin.



The Lama, is the Camel of Peru and Chili; and before the conquest of those Countries by the Spaniards, was the only beast of burden known to the Indians — its disposition is mild, gentle, and tractable. Before the introduction of Mules, these Animals were used by the natives to plow the land, and now serve to carry burdens. They march slowly, and seldom accomplish journeys of more than four or five leagues a day; but what they want in speed is made up by perseverance and industry. They travel long journeys in countries impracticable to most other animals. They are very sure footed, and are



much employed in transporting the rich ores dug out of the mines of Potosi over the rugged hills and narrow paths of the Andes.

Bolivar remarks that in his time three hundred thousand of these Animals were constantly employed in this work. They lie down ~~to~~ be loaded; and when weary, no blows can excite them to quicken their pace.

They neither defend themselves with their feet nor their teeth: when angry, they have no other method of revenging injuries but by spitting. They can throw out their saliva to the distance of ten paces; and if it fall on the skin, it raises an



itching, accompanied with a slight inflammation. Their flesh is eaten, and said to be as good as mutton.

Like the Camel they have the faculty of abstaining long from water (sometimes four or five days) and like that animals, their food is coarse and trifling.

The wild Lamas, called Guanacos, are stronger and more active than the domestic kind. They live in herds, and inhabit the highest regions of the Cordeliers. They are hunted for the sake of their flesh and their hair of the latter the Indians make cloth. They vary in colour.



The Lebu. , copied from a living animal exhibited in Dublin.



Wm. M. M.



## The Lebu

These animals are all equally docile and gentle when tamed; and are in general covered with fine glossy hair, softer and more beautiful than that of the common Cow. The Lebu is the smallest of the Bisons. Their humps are of different sizes, in some weighing from forty to fifty pounds, but in others less. That part is in general considered as a great delicacy; and when dressed has much the appearance and taste of mutton.

The Bisons of Madagascar and Malabar are of the great kind; those of Arabia, Petrea, and most parts of Africa, are of the Lebu or small kind,



in America, especially towards the north. The Bison is well known.

They herd together in droves of from one to two hundred, on the banks of the Mississippi; where the Indians hunt them, their flesh being esteemed good eating. They all breed with the same Cow. The hump,

which is only an accidental characteristic, gradually declines, and in a few generations, no vestiges of it remain. Thus we see, whether it be the wild or the tame Ox, the Bonasus or the Uras, the Bison or the Lebu, by whatever name they are distinguished, and though variously classed by Naturalists, in



reality they are the same; and however diversified in their appearance and properties, are descendants of one common stock; of which the most unequivocal proof is, that they all mix and breed with each other. The Oxen of India are of different sizes, and are made use of in travelling, as substitutes for horses.

in Persia there are many Oxen entirely white, with small blunt horns, and humps on their backs. They are very strong, and carry heavy burdens. When about to be loaded, they drop down on their knees like the Camel, and rise when their burthens are properly fastened.



## The Toucan,

The drawing of which has been given  
at Page 20.

Of this extraordinary bird there are  
four or five varieties.

it is reported by travellers, that this

Bird, though furnished with so

formidable a beak, is harmless and

gentle, being so easily made tame

as to sit and hatch its young in

houses. it feeds chiefly upon pepper

which it devours very greedily, gorging

itself in such a manner, that it

voids it crude and uncocted. This

however is no objection to the nat-

ives from using it again: they even

prefer it before that pepper which

is fresh gathered from the tree: and



seem persuaded that the strength and heat of the pepper is qualified by the bird, and that all its noxious qualities are thus exhausted.

This bird is only found in the warm climates of South America, where it is in great request, both for the delicacy of its flesh, which is tender and nourishing, and for the beauty of the plumage, particularly the feathers of the breast. The skin of this part the Indians pluck off, and when dry glue to their cheeks; and this they consider as an irresistible addition to their beauty.

---

Of The Ternal Bat, Proussette,  
or Great Bat of Madagascar  
The drawing of which has been given  
at Page 29.



The Broussette, and the Brongette, seem to form two distinct species, which however are so full of resemblances to each other, that they ought not, in my opinion, to be presented asunder. The latter differs from the former solely in the size of the body, and the colour of the hair. They both belong nearly to the same hot climates of the Old Continent. we meet with them in Madagascar, in the island of Bourbon, in Ternate, in the Phillipine, and other islands of the Indian Archipelago, where, indeed, they seem to be more common than in the neighbouring Continent. in the hotter countries of the New World, we like-

-wise



meet with another flying quadruped, of which we know not the American name, but to which has been affixed the denomination of Spectre, or Vampyre, because it sucks the blood of men, and of animals while they are asleep, without causing even sufficient pain to awake them.

This American Animal is of a Species different from those of the Rousette and the Pongette, which are both to be found solely in Africa, and in the southern parts of Asia.

The Spectre is smaller than the Pongette, which is itself smaller than the Rousette. The former when it flies, seems to be of the size of a Pigeon; the second of the size of a Raven; and the third (which is the animal we have drawn) of



The size of a large Hen.  
There is no doubt ~~at~~ therefore, but that  
the species of the Spectre is different  
from those of the Rougette and Prongette.  
it is an Animal not less mischievous  
than it is deformed; it is the pest of  
man, the torment and destruction  
of animals. in confirmation of  
this truth a more authentic testi-  
mony cannot be produced than  
that of M. De la Condamine.  
"The Bats," says he, "which suck the  
blood of horses, of mules, and even of  
men, when they do not guard against  
it by sleeping under the shelter of a  
Pavilion, are a scourge common to  
most of the hot Countries of America.  
at Borja, and several other places,  
they have entirely destroyed the large



cattle which the Missionaries had brought thither, and which had begun to multiply,"

the Proufette and the Prougette, besides being larger and stronger, are perhaps yet more mischievous than the Vampire; but it is by open force, and in the day as well as in the night, that they commit hostilities.

Fowls and small animals are the objects of their destructive fury; they even attack men, and bite their faces most cruelly; but no Traveller has accused them of surprising men and animals, while asleep, and of taking such opportunities to suck their blood.

All these Bats are animals carnivorous, voracious, and possessed of an appetite for every thing that offers.



in a dearth of flesh or fish, they feed on vegetables and fruits of every kind. as they are fond of the juice of the palm tree, so it is easy to take them by placing in the neighbourhood of their retreat a few vessels filled with palm tree water or other fermented liquor, with which they intoxicate themselves.

They fasten to, and suspend themselves from trees with their claws.

They are usually seen in troops, and more so by night than by day, places which are much frequented they shun; and their favourite residence is in deserted parts of islands.

"I have frequently (says the Count de Buffon) "thought it worth while



## Appendix

To examine how it is possible that these animals should suck the blood of a person asleep, without causing at the same time, a pain so sensible as to awake him. - were they to cut the flesh with their teeth, or with their claws, the pain of the bite would effectually rouse any of the human species, however soundly asleep. With their tongue only, then, it is possible for them to make such minute apertures in the skin, as to imbibe the blood through them, and to open the veins without causing an acute pain. The tongue of the Vampyre I have not had an opportunity of examining. but that of several Rouffettes, which M<sup>r</sup> Daubenton has attentively examined, seems to indicate



the possibility of the fact. it is sharp, and full of prickles directed backwards; and it appears that these prickles, or points, from their exceeding minuteness, may be insinuated into the pores of the skin, may enlarge them, and may penetrate them so deep, as to command a flow of blood by the continued suction of the tongue. but we can only reason upon a fact of which all the circumstances are imperfectly known to us, and of which some are perhaps exaggerated, or erroneously related, by the writers who have transmitted them to us.



Appendix

of the White Grouse, or Ptarmigan  
The drawing of which has been  
given at Page 28

The white Grouse is fond of lofty situations  
where it braves the severest cold: it is  
found in most of the northern parts  
of Europe, even as far as Greenland; in  
this country it is only to be met  
with on the summits of some of our  
highest hills, chiefly in the highlands  
of Scotland, in the Hebrides, and  
Orkneys, and sometimes, but rarely  
on the lofty hills of Cumberland  
and Wales. Buffon speaking of  
this bird, says, that it avoids the  
Solar heat, and prefers the biting  
frosts on the tops of the mountains:  
for as the snow melts on the sides



of the mountains, it constantly ascends, till it gains the summit, where it forms holes and burrows in the snow. They pair at the same time as the Grouse; the female lays eight or ten eggs; she makes no nest but deposits them on the ground. In winter they fly in flocks, and are so little accustomed to the sight of man, that they suffer themselves to be easily taken either with the snare or gun. They feed on the wild productions of the hills, which sometimes give the flesh a bitter taste, but not unpalatable: it is dark coloured and according to H. Bracken, has somewhat the flavour of the Hare.

The End



PXE 869











